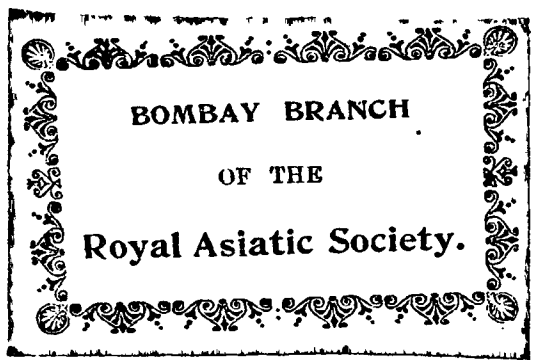
REPORT ON THE

ADMINISTRATION OF BURMA

1919-20

Price Rs. 3.

15
L.
16



Digitized with financial assistance from

Government of Maharashtra

on 01 February, 2020

BY Govt of Burma
15/5/22

REPORT

ON THE

ADMINISTRATION OF BURMA

FOR THE YEAR

1919-20

133909

RANGOON
SUPERINTENDENT, GOVERNMENT PRINTING, BURMA
1922

LIST OF AGENTS FOR THE SALE OF GOVERNMENT PUBLICATIONS.

In India

American Baptist Mission Press, Rangoon,
Rangoon Times Press, Rangoon,
Maung Lu Gale, Law Book Depôt, 42, Ayo-o-gale Mandalay.
Thacker, Spink & Co., Calcutta and Simla.
W. Newman & Co., Calcutta,
Butterworth & Co. (India), Ltd, Calcutta,
Thacker & Co., Ltd., Bombay,
* D. B. Taraporevala, Sons & Co., Bombay,
Higginbotham & Co., Madras.
Manager, The "Hitavada," Nagpur.

In England:

Henry S. King & Co., 65, Cornhill, E.C,
A. Constable & Co., 10, Orange Street, Leicester Square, W.C.
Kegan Paul, Trench, Trubner & Co., Ltd., 68—74, Carter Lane E.C., and 39, New Oxford Street, W.C.
Bernard Quaritch, 11, Grafton Street, New Bond Street, W.
P. S. King & Son, 2 & 4, Great Smith Street, Westminster, S.W.
Grindlay & Co., 54, Parliament Street, S.W.
T. Fisher Unwin, Ltd., 1, Adelphi Terrace, W.C.
W. Thacker & Co., 2, Creed Lane, Ludgate Hill, E.C.
Luzac & Co., 46, Great Russell Street, W.C.
Wheldon & Wesley, Ltd, 28, Essex Street, Strand, W.C
Oliver & Boyd, Tweeddale Court, Edinburgh.
E. Ponsonby, Ltd., 116, Grafton Street, Dublin.
B. H. Blackwell, 50 & 51, Broad Street, Oxford.
Deighton, Bell & Co., Ltd., Trinity Street, Cambridge.

On the Continent:

Ernest Leroux, 28, Rue Bonaparte, Paris, France.
Martinus Nijhoff, The Hague, Holland.
Otto Harrassowitz, Leipzig, Germany.
R. Friedlander & Sohn, 11, Carlstrasse, Berlin, Germany.

---

* For the sale of official publications excluding those of the Legislative Department of the Government of Burma.

TABLE OF CONTENTS.

REPORT ON THE ADMINISTRATION OF BURMA FOR THE YEAR 1919-20.

PART I.—General Summary.

PART II.—Departmental Chapters.

CHAPTER I.—PHYSICAL AND POLITICAL GEOGRAPHY.

PHYSICAL—

Physical Features of the Country, Area, Climate and Chief Staples.—(See pages 1 to 6 of Part II of the Report on the Administration of Burma for the year 1911-12.)

POLITICAL—

Historical Summary.—(See pages 6 to 11 of Part II of the Report on the Administration of Burma for the year 1911-12.)

Form of Administration.—(See pages 11 to 14 of Part II of the Report on the Administration of Burma for the year 1911-12 and page 1 of Part II of the Report on the Administration of Burma for the year 1914-15.)

Character of Land Tenures; System of Survey and Settlement.—(See pages 15 to 21 of Part II of the Report on the Administration of Burma for the year 1911-12.)

Civil Divisions of British Territory.—(See pages 21 to 24 of Part II of the report on the Administration of Burma for the year 1911-12 and page 2 of Part II of the Report on the Administration of Burma for the year 1914-15.)

Details of the last Census; Tribes and Languages.—(See pages 24 to 30 of Part II of the Report on the Administration of Burma for the year 1911-12.)

	PARA	PAGE
Changes in the Administration—		
The Lieutenant-Governor ..	1	2
Administrative territorial changes	2	*ib.*
Additions to and changes in the Administrative Staff ..	3	3
Relations with Tributary States and Frontier affairs—		
(*i*) *Shan and Karenni States.*		
The Southern Shan States ..	4	5
The Karenni States ..	5	8
The Northern Shan States ..	6	9
Other Shan States ..	7	12
(*ii*) *The Chin Hills.*		
—	8	13
(*iii*) *The Kachin Hills.*		
—	9	16
Condition of the People—		
—	10	17

CHAPTER II.—ADMINISTRATION OF THE LAND.

	PARA	PAGE
Realization of the Revenue—		
Changes in the Law, Rules and Directions	11	19
Demand, collections, remissions and outstandings	12	20
Revenue proceedings and coercive processes	13	22
Surveys—		
Surveys by Imperial agency ..	14	23
Surveys by Provincial agency: extension and revision surveys	15	24
Town and fishery surveys and surveys of leased areas ..	16	*ib.*
Settlements—		
Progress of Settlements ..	17	25
Financial results and expenditure	18	26
Land Records—		
Area under supplementary survey	19	26
Cost of supplementary survey ..	20	*ib.*
Training of officers ..	21	27
Transfers of land	22	*ib.*
Waste Lands—		
Grants and leases for cultivation	23	29
Revenue-free grants of land and assignments of land revenue	24	*ib.*
Government Estates and Wards' Estates—		
—	25	29
Revenue and Rent-paying Class e—		
Area held by agriculturists ..	26	29
Tenancies	27	30

CHAPTER III.—PROTECTION.

Legislative Authority.—(See pages 40 and 41 of Part II of the Report on the Administration of Burma for the year 1911-12.)

	PARA	PAGE
Course of Legislation—		
Work of Legislative Council ..	28	31
General Acts affecting Burma ..	29	33
Regulations affecting Burma ..	30	35
Extension of Enactments to Shan States	31	*ib.*
Police—		
Civil Police : strength, recruitment and cost	32	35
Conduct, education and training	33	36
Buildings	34	37
Crime	35	*ib.*
Working of the Police ..	36	38
Important incidents ..	37	39
Offences under Special Acts ..	38	41
Non-cognizable crime ..	39	42
Preventive sections, surveillance and identification ..	40	*ib.*
Punitive Police	41	44
Railway Police	42	*ib.*
Military Police	43	45
Rangoon Town Police ..	44	49
Village Administration ..	45	51
Wild animals and snakes ..	46	53
Criminal Justice—		
General	47	54
Cases	48	55
Disposal of cases	49	56
Punishments	50	58
Appeals	51	59
Revisions	52	60
Prisons—		
Accommodation	53	61
Prisoners	54	*ib.*
Discipline	55	62
Financial	56	63
Vital	57	64
Miscellaneous	58	65
Civil Justice—		
Courts	59	67
Suits	60	68
Appeals	61	71
The Chief Court of Lower Burma	62	72
The Court of the Judicial Commissioner, Upper Burma ..	63	73
General	64	74
Registration—		
General	65	74
Deeds registered	66	*ib.*
Income and expenditure ..	67	75
Joint Stock Companies—		
——	68	75
Local Boards Administration—		
——	69	75
Municipal Administration—		
Rangoon Municipality ..	70	76
Minor Municipalities ..	71	81
Military—		
Strength of the Garrison ..	72	83
Marine—		
Light-houses and light-ships ..	73	84
Port Administration, Rangoon ..	74	85
Pilot Service : Rangoon ..	75	86
Minor ports	76	87
Commercial Marine : shipping ..	77	*ib.*
Commercial Marine : wrecks and casualties	78	89
Government steamers and launches	79	90
Marine works and surveys ..	80	*ib.*

CHAPTER IV.—PRODUCTION AND DISTRIBUTION.

Agriculture—		
Occupied and cultivated areas ..	81	92
Area irrigated	82	93
The Agricultural Department ..	83	*ib.*
Agricultural research ..	84	95
Seed distribution and demonstration	85	97
Veterinary Department Staff and Veterinary School ..	86	98
Cattle Disease	87	*ib.*
Stock	88	99
Agricultural loans	89	*ib.*
Protection from floods ..	90	101
Weather and Crops—		
Character of the seasons ..	91	101
Outturns and prices ..	92	102
Co-operation—		
Administrative and General ..	93	103
Unions and Central Banks	94	104
Agricultural Credit Societies ..	95	105
Colonization areas ..	96	106
Other Societies	97	*ib.*
Horticulture—		
Agri-Horticultural Societies ..	98	107
Forests—		
Forest reserves, forest settlement, demarcation, survey and working plans	99	107
Protection of forests.. ..	100	108
Improvement of forests ..	101	109
Exploitation of timber ..	102	110
Finance	103	111

CHAPTER IV.—PRODUCTION AND DISTRIBUTION—*concld.*

	PARA	PAGE
Mines and Quarries—		
The Indian Mines Act	104	111
New concessions	105	112
Petroleum	106	113
Wolfram	107	*ib.*
Rubies, Sapphires and Spinels	108	*ib.*
Other minerals	109	*ib.*
Quarry stones and clay	110	114
Revenue from mines and quarries	111	115
Manufactures—		
Principal Industries	112	115
Factories	113	116
Trade—		
Maritime trade: total value and revenue	114	117
Rangoon trade: total figures	115	118
Rangoon import trade	116	119
Exports of rice	117	122
Exports of other commodities	118	123
Distribution of Rangoon trade	119	125
Subordinate ports	120	126
Intra-provincial sea-borne trade	121	*ib.*
Transfrontier trade: total trade	122	*ib.*
China	123	*ib.*
Siam	124	127
Trade with unadministered Kachin country	125	*ib.*
Trade with the Shan States and Karenni	126	128
Public Works—		
Administrative and General	127	129
(i) Roads and Buildings.		
Communications	128	129
Buildings: Imperial and Provincial	129	130
Miscellaneous public improvements and sanitary works	130	131
Military Works	131	*ib.*
(ii) Railways and Tramways.		
Railways: construction and surveys	132	132
Accidents and interruptions	133	*ib.*
Traffic and Finance	134	134
Tramways	135	135
(iii) Canals.		
Navigation Canals	136	135
Irrigation—		
Major irrigation works	137	136
Minor irrigation works	138	137

CHAPTER V.—REVENUE AND FINANCE.

	PARA	PAGE
Provincial Settlement—		
——	139	138
Gross Revenue and Expenditure—		
——	140	139
(a) Imperial Revenue and Finance.		
Total Imperial figures: notable variations	141	139
Land Revenue—		
——	142	140
Canal (Navigation and Irrigation) Revenue—		
——	143	142
Sources of Imperial Revenue other than the land—		
Customs	144	142
Opium	145	*ib.*
Salt—General	146	*ib.*
Supplies of Salt	147	143
Excise—General	148	144
Excise—Opium	149	145
Excise—Liquors	150	146
Ganja, cocaine and morphia	151	148
Stamps	152	149
Assessed taxes	153	150
(b) Revenue and Finance other than Imperial.		
Provincial Receipts and Expenditure—		
Provincial receipts	154	151
Provincial expenditure	155	152
Forests	156	*ib.*
Local Funds—		
District Cess Funds	157	153
District Funds	158	*ib.*
Other Funds	159	154
Road and Education Cesses—		
——	160	156
Municipal Revenues—		
Rangoon Municipality	161	156
Other Municipalities	162	157
Other Funds—		
——	163	158
Paper Currency—		
——	164	158

CHAPTER VI.—Vital Statistics and Medical Services.

	PARA	PAGE
Births and Deaths—		
Area under registration and total population	165	159
Number of births and deaths ..	166	*ib.*
Causes of death	167	160
Quinine Products	168	161
Emigration and Immigration—		
—— .. .	169	161
Medical Relief—	PARA	PAGE
Hospitals and dispensaries ..	170	161
Attendance and treatment ..	171	162
General	172	*ib.*
Lunatic Asylums	173	163
Sanitation—		
Principal works and expenditure	174	164
Vaccination—		
Establishment	175	165
Number of operations ..	176	*ib.*
Expenditure	177	166
Vaccine Depôt, Meiktila ..	178	167

CHAPTER VII.—Instruction.

General System of Public Instruction.—(See pages 129 to 137 of Part II of the Report on the Administration of Burma for the year 1917-18.)

Education—		
General progress and educational measures	179	168
Number of schools and scholars and expenditure	180	170
Primary education	181	171
Secondary education ..	182	174
Collegiate education ..	183	176
Technical education	184	179
Training Schools	185	180
European Schools	186	182
Education—*concld.*		
Education of Mahomedans and special classes	187	183
Female education	188	185
Insein Reformatory School ..	189	186
Literature and the Press—		
Publications registered ..	190	187
Presses, newspapers and periodicals	191	188
Literary Societies.—(See page 110 of Part II of the Report on the Administration of Burma for the year 1911-12.)		
Rangoon Societies	192	188
Arts and Sciences—		
——	193	189

CHAPTER VIII.—Archaeology.

—— 194 190

CHAPTER IX.—Miscellaneous.

Ecclesiastical Jurisdiction.—(See page 113 of Part II of the Report on the Administration of Burma for the year 1911-12.)

Ecclesiastical—		
——	195	192
Stationery—		
——	196	192
Offices of the Chemical Examiner and the Bacteriologist to the Government of Burma—		
——	197	192
Office of the Superintendent, Government Printing, Burma—		
——	198	193

REPORT

ON THE

ADMINISTRATION OF BURMA

For the Year 1919-20.

PART I.

GENERAL SUMMARY.

1. The Honourable Sir Reginald Henry Craddock, K.C.S.I., I.C.S., was Lieutenant-Governor throughout the year. Such geographical changes as were made between administrative units were unimportant with the exception of the creation of a new Northern Range for a Deputy Inspector-General of Police. In the Forest Department an interesting innovation was the establishment of a new Utilisation Circle with headquarters at Rangoon, the duty of whose incumbent is to co-ordinate the commercial work of the Department. The appointment of a Development Commissioner for Burma was sanctioned by the Secretary of State; such subjects as Mines, Industries, Co-operation, Agriculture and Veterinary matters, which had hitherto been dealt with by the Financial Commissioner, have been transferred to the newly created office. Towards the end of the year under report the Imperial and Provincial Services of the Public Works Department were amalgamated into one service, called The Indian Service of Engineers, while a new Provincial Engineers' Service, to be known as "The Burma Engineering Service," was constituted. An important change in the Secretariat was the creation of a new post of Legal Remembrancer and Secretary, Legislative and Judicial Departments.

2. The Southern Shan States experienced some minor frontier raids, but passed otherwise an uneventful year. The rice crop was poor, but oranges and dry crops proved satisfactory. Trade expanded,

and attention was paid to communications. The health of the people was good on the whole, though malaria claimed many victims; among the cattle rinderpest was severe in certain places. The Karenni States suffered from deficient rainfall, but were free from cattle disease, and the people, who can turn their hands to subsidiary occupations, apart from agriculture, were prosperous. Attacks were made upon the frontier of the Northern Shan States, but were easily repulsed; there was an improvement in the public health, and the general condition of the country was satisfactory in spite of an indifferent harvest. The Chin Hills reverted to a peaceful *regime* after the disturbances of the two preceding years; proposals were adumbrated by Government for the gradual bringing under control of the *hinterland* which has hitherto been regarded as unadministered territory. An abortive attack, for which the authorities were prepared, upon a Military Police post was the only incident of note which occurred in the Kachin Hills.

3. The agricultural year was again unfavourable to the Province. Prices remained high, and influenza, cholera and small-pox were prevalent. There was a slight increase in the demand of land revenue proper and in the amount actually collected: remissions were somewhat less than in the previous year. The revenue was, on the whole, collected without much difficulty. Settlement operations were in progress in six districts, but no new rates were introduced during the year. Statistics for the last three years reveal a slow but steady decrease in the volume of revenue-paying land occupied by agriculturists.

4. There was considerable legislative activity during the year. The Burma Towns Amendment Act, the Rangoon Development Trust Act, the Rangoon Rent Act and the Rangoon University Act are among the more important measures which became law during the period under report, or shortly after its conclusion. Progress was also made with the complex City of Rangoon Municipal Bill, which was referred to a Select Committee towards the close of the year. There was a considerable rise in the volume of cognisable offences; the increase was spread over every class of crime, and shared by every division of the Province. The standard of work of the police, as measured by the percentage of successful prosecutions remained

practically at the level attained in the previous year. The Finger Print Bureau continued to do useful work, and the number of prisoners with previous convictions who were identified by the police advanced by 25 *per cent.* The Military Police were engaged in certain minor operations along the Yünnanese Frontier. The work of the Criminal Courts increased with the rise in crime, but there was improvement in the reduction of unnecessary work by the dismissal of trivial complaints. The average duration of criminal trials showed a slight, and that of appeals a marked, decrease. There was a further decline in the daily average number of prisoners in the jails due to liberal releases under the Peace Clemency Scheme. The enlargement of many of the best behaved men resulted in the appointment of a lower type of prisoner as convic. officer, and discipline suffered in consequence. The health of prisoners was better, owing to the absence of influenza. The Meiktila Juvenile Jail started a scheme of instruction in agriculture on scientific lines, which should be most useful to the young convicts after their release. In the sphere of village administration steps were taken to have a properly considered scheme of amalgamation made out for each district, to be effected gradually as vacancies occur in the ranks of headmen. This is in pursuance of the settled policy of Government to assign to each headman a tract sufficient to provide him with adequate emoluments subject to such limits as may be imposed by considerations of administrative efficiency. The judicial work of headmen was good, and they rendered much assistance to the Police.

There was a general increase in the volume of civil litigation, corresponding to a return of prosperity, especially among the agricultural classes. The scheme for the reorganisation of Civil Courts was completed. The main objects of the scheme are the creation of as many whole-time Civil Judges as possible, and the release of Subordinate Judges from the work of trying criminal cases, and from certain extraneous executive duties.

5. Two new municipalities were constituted, each with a substantial majority of elected members. The office of Vice-President was held in several municipalities by a non-official, and six municipalities had a non-official President: two such bodies were composed entirely of non-official members. Pending the introduction of a considered measure of

local self-government, proposals were under consideration for the modification of the constitution of Municipal and Town Committees so as to provide for as large a measure of election as may be possible under the existing law. Owing to the abnormal conditions produced by the war many important municipal schemes in hand or under consideration, for the improvement of water-supply, drainage and conservancy, had to be held up till a more favourable occasion. Even in Rangoon no extension was undertaken to the sewerage area, and no new roads were constructed: it was indeed found to be impossible to expend the whole of the sum allotted in the budget to road-making. The death-rate remained stationary in Rangoon where influenza was epidemic throughout the year, but the gradual disappearance of the disease elsewhere led to a reduction of the death-rate in 75 *per cent.* of the remaining municipalities.

6. Important proposals were sanctioned by the Secretary of State for the advancement of agriculture, including the establishment of an Agricultural College at Mandalay with a well equipped staff, Imperial, Provincial and Subordinate. Attention continued to be paid to improving the strain of cotton, and tests at the small cotton ginnery erected at Mahlaing attained encouraging results. The cultivation of sugarcane was stimulated by the visit of the Sugar Committee, whose members considered Burma a most promising field: experiments were carried out by the Agricultural Department in the Myitkyina District and elsewhere, and proved satisfactory. Pure strain paddy seed was again distributed in large quantities, and a simple type of drill was introduced for the sowing of sessamum. The estimated outturn of unhusked rice was some half a million tons below that of the preceding year. Prices were controlled by Government at the beginning of the year, with a maximum of Rs. 150, in the interests of India, where food grains were very scarce. For the new crop of 1919-20 the control was continued, but with the object of preventing an undue depletion of food stocks in Burma itself, and a new maximum was fixed at Rs. 180 for purchase of paddy destined for export in the form of rice. Internal prices did, in fact, exceed this maximum, but up to the close of the year it was not found necessary to regulate the retail price of rice sold within the country. The estimated outturn of groundnuts showed a slight increase, but that of small white beans declined by nearly half,

owing to the fall in prices. The co-operative movement exhibited a healthy expansion, especially in new areas, the result being almost entirely due to non-official effort. A successful biennial conference was held at Mandalay in September 1919. The Upper Burma Central Bank suffered from a depreciation in certain Government securities held as fluid resource against deposits, and from the phenomenal rise of exchange, which discouraged European deposits on which the Bank has hitherto mainly relied. The former circumstance prevented the payment of a dividend, but the latter trouble proved evanescent, and the year closed with a substantial surplus of deposits over the figure for the previous year. Several new District Central Banks were established and some of the older Central Banks made good progress towards, financial independence of the Bank at Mandalay. Agricultural Credit Societies showed a large increase in numbers: whether quality has advanced *pari passu* with quantity is not so certain, but it is at least encouraging to note that nearly all the really bad societies are of long standing. There was some expansion of colonisation in the Shwebo District, and the older colonies did well. Town Banks continued to multiply, and a Central Urban Bank was established in Rangoon.

7. The Forest Department increased its expenditure on roads and buildings, but much still remains to be done in this direction if the forests are to be adequately developed. The growing interest in timbers other than teak has largely modified pre-existing theories on working plans, and a Conservatorship of Working Plans was created during the year. The revised system, mentioned in last year's Report, of concentrated fellings of every species of timber, followed by artificial regeneration, involves the introduction of labour on a large scale, and this need is being met by the establishment of forest villages, which exist in most divisions of the province. The exploitation of all marketable species showed a rapid expansion, and selling prices rose steadily throughout the year. In the mining industry the chief occurrence of note was the withdrawal of the Government guarantee for the purchase of wolfram, and the resultant collapse of the market at the beginning of the year. The value of tin, on the other hand, enhanced, and the output of block tin and tin ore showed a material increase. Precious stones declined somewhat in volume, but increased in value; petroleum advanced both

in price and quantity, though the Yenangyaung field would appear to have passed its zenith. There was a considerable rise in the outturn of silver by the Burma Mines Company in the Northern Shan States.

8. No new industries were established, and the principal existing industries continued to be rice-milling, saw-milling, petroleum refining and the transport industries. There was a slight increase in the number of registered factories: a rise in the cost of necessaries caused some industrial unrest, which led to a general and considerable rise in wages. Managers are displaying a growing interest in the well-being of their operatives, and the fencing of machinery is steadily improving. As might have been expected, the aggregate value of the maritime trade of the Province exceeded that of any year before the war. The general advancement of prices may be admitted, but there was also a distinct improvement in trade conditions; thus there was a further rise in tonnage, although a return to the standard attained before the war was still a long way off. The main feature of the Burma trade was the continuance of the control of rice, under which four-fifths of the export went to India. The result was a fall of 10 *per cent.* in the total foreign trade, and an equivalent rise in the volume of the Indian trade. Both Japan and the United States of America continued to advance their trade with Burma, though the relative position of the former was weaker than in the preceding year. The United Kingdom remained as Burma's best customer, claiming half the imports, and two-fifths of the exports. The principal imports from foreign countries were cotton manufactures, metals, silk and sugar, and the principal foreign exports were rice, other cereals, raw cotton and paraffin wax. The chief Indian imports were manufactured cotton, twist and yarn, manufactured jute and coal, while the commodities mainly exported to India were rice, mineral oils, and wood. The total value of the transfrontier trade between Burma and adjacent countries exhibited a slight increase.

9. The Public Works Department increased its expenditure, especially under the head of Provincial Civil Works. The year marked the commencement of a new and settled policy regarding the improvement of existing communications, which are in an extremely backward state. An officer of the Department and one from the Civil

Service had been deputed to examine the whole question, and in accordance with their recommendations it was decided to proceed with the metalling of many of the existing unmetalled roads, and with the erection of permanent bridges, where these are required. A hydro-electric survey was commenced in October 1919, and some 132 possible power sites were considered. On the Irrigation side progress was made with the construction of the distributaries of the new Ye-u Canal. Several new railway projects were under consideration during the year and the Aungban-Heho section of the Southern Shan States Railway was nearing completion at its close. A few accidents occurred on the Burma Railways system, but the only case involving human injury was one in which a train collided with a bullock cart at a level-crossing and killed the cartman.

10. No modification was introduced during the year of report into the Provincial Settlement, according to which the receipts and expenditure of the Province are divided among the Imperial and Provincial Governments. The gross revenue receipts of the Province increased from Rs. 14,64 *lakhs* to Rs. 15,22 *lakhs*, and the rise was shared by both Imperial and Provincial heads of account. An increase of some 50 *lakhs* of rupees under Income-tax was due to the levy of Excess Profits Duty, to the general prosperity of the Province and to improved assessment in Rangoon. A decrease under Land Revenue was due partly to the fact that the figures for the previous year were swollen by the realisation of postponed collections, and partly to postponements and remissions made in the year under report. A decrease under salt was due to a reduction in the quality of imported salt, and a decrease under Customs to the fact that under the Rice Control Scheme the bulk of the rice crop was diverted to India, and so paid no export duty. An increase in the excise receipts was mainly attributable to revenue derived from alcoholic liquor, the opium revenue showing a decline owing to the revision of allowances throughout the Province. The Madras tree-tax system of excising *tari* was introduced into five more districts. Gross receipts under stamps amounted to Rs. 44·22 *lakhs*, the highest figure ever recorded, while forest revenue appreciated by Rs. 36 *lakhs*. Gross expenditure rose slightly under Imperial, and markedly under Provincial, heads. Military and Major

Irrigation works were the chief contributors to the former increase, while Civil Works accounted for nearly half the rise in provincial expenditure. A fall in the price of coal led to decreased expenditure under Ports and Pilotage, and there was a decline in the charges incurred under Land Revenue.

11. Mortality from disease proved less than in the previous year. The principal decrease occurred under the head of "Fevers," in which influenza is included; on the other hand there was a considerable increase in the deaths from small-pox, while the cholera epidemic of 1919 was the most severe outbreak recorded since 1915. The Provincial death-rate declined to 31·09 *per mille*, a figure which is still considerably in excess of the previous five years' mean. Simultaneously the Provincial birth-rate fell to below 30. There was a slight decrease in the figures for hospital attendance, but 1918, with its severe epidemic of influenza, had been an abnormal year in this respect. The slight increase in the expenditure on hospitals and dispensaries was due to the steady upward tendency of prices. Several important building schemes had to remain in abeyance owing to the scarcity of establishment and materials: the need for an expansion of hospital construction is pressing, and there is much leeway to make up in the course of the next few years. Both the medical and the nursing staffs continued to labour under the depletion induced by the war. The Rangoon Lunatic Asylum was much overcrowded, especially in the criminal section, and steps were taken to expedite the construction of the female section of the new asylum at Kokkaing. The total number of vaccinations performed increased by 50 *per cent.*, and the average cost per case was the lowest recorded for several years past.

12. The Rangoon University scheme was completed, and submitted to the Government of India and the Secretary of State. There was again a slight decline in the total number of pupils under instruction in recognised schools, but this was practically confined to Primary Vernacular Schools. In Higher and Secondary Education there was an advance. The reason for the decrease in the number of Primary Vernacular Schools, nearly all of which are under private management, is that it was found impossible to provide the money or the staff to maintain in a state of even tolerable efficiency the large number of

schools which had sprung up under the stimulus of the expansion policy pursued by Government from the year 1913 onwards. The policy now adopted aims at the reorganisation and improvement of schools which appear capable of proving fairly efficient, and this involves the withdrawal of recognition from undeserving institutions. An important innovation was the experimental opening of two Monastic Training Schools at Mandalay and Moulmein. The students are monks, and the head of the monastery is in general control—the Education Department supplying a Master of Method and a competent staff of assistants. The results of the University Examinations were somewhat disappointing; it has been suggested that the papers this year were more strictly marked. The number of girls under instruction decreased in vernacular schools for the reason mentioned above, but increased in all other classes of schools. Mixed education conducted by men is, however, unpopular, and there is evidence of a strong demand for separate Vernacular Girls' Schools, and an increasing number of trained women teachers. The percentage of success attained by girls in the higher examinations was most encouraging.

PART II.

DEPARTMENTAL CHAPTERS.

NOTE.—The departmental reports and other references on which this *Report on the Administration of Burma* is based, are noted at the beginning of each chapter. The departmental reports do not all cover the same period. The Reports on the Administration of Civil and Criminal Justice, the Police, Prisons, the Registration Department, the Salt Revenue, the Measures adopted for the Extermination of Wild Animals and Poisonous Snakes, Lunatic Asylums, the Report on the Sanitary Administration, the Report of the Chemical Examiner, the Report on the Working of the Indian Factories Act, 1911, and the Resolution on the Reports on Village Administration deal with events which took place within the calendar year 1919; the Shan States, Chin Hills and North-Eastern Frontier Reports, the Land Revenue, Land Records and Forest Administration Reports, the Season and Crop Report, the Report on the Working of the Co-operative Societies Act and the Report of the Department of Agriculture are concerned with the agricultural year from the 1st July 1919 to the close of June 1920. All other reports cover the twelve months of the official or financial year that ended on the 31st March 1920.

CHAPTER I.

PHYSICAL AND POLITICAL GEOGRAPHY.

REFERENCES—

Report on the Administration of the Shan and Karenni States for the year ended the 30th June 1920.
Report on the Administration of the Chin Hills for the year ended the 30th June 1920.
Report on the North-Eastern Frontier for the year ended the 30th June 1920.
Season and Crop Report of Burma for the year ended the 30th June 1920.
Land Records Administration Report of Burma for the year ended the 30th June 1920.
Report on the Civil Veterinary Department (including the Insein Veterinary School), Burma, for the year ended the 30th June 1920.
Report on the Sanitary Administration of Burma for the year 1919.

PHYSICAL.

Physical Features of the Country, Area, Climate and Chief Staples.

For information on this subject reference should be made to paragraphs 1 to 8 of the *Report on the Administration of Burma* for the year 1911-12.

POLITICAL.

Historical Summary.

For information on this subject reference should be made to paragraphs 9 to 18 of the *Report on the Administration of Burma* for the year 1911-12.

Form of Administration.

For information on this subject reference should be made to paragraphs 19 to 38 of the *Report on the Administration of Burma* for the year 1911-12 and to paragraph 1 of the *Report on the Administration of Burma* for the year 1914-15.

Character of Land Tenures: System of Survey and Settlement.

For information on this subject reference should be made to paragraphs 39 to 55 of the *Report on the Administration of Burma* for the year 1911-12.

Civil Divisions of British Territory.

For information on this subject reference should be made to paragraphs 56 to 68 of the *Report on the Administration of Burma* for the year 1911-12 and to paragraph 2 of the *Report on the Administration of Burma* for the year 1914-15.

Details of the last Census: Tribes and Languages.

For information on this subject reference should be made to paragraphs 69 to 76 of the *Report on the Administration of Burma* for the year 1911-12.

Changes in the Administration.

The Lieutenant-Governor.

1. The Hon'ble Sir Reginald Henry Craddock, K.C.S.I., I.C.S., was Lieutenant-Governor throughout the year. His Honour paid a visit to Delhi in March 1920 at the request of the Governor-General.

Administrative territorial changes.

2. The boundary between the Toungoo District of the Tenasserim Division and the Yamèthin District of the Meiktila Division was altered with effect from 1st April 1920 by the transfer of 0·99 square mile from Upper Burma to Lower Burma and of 36·64 square miles from Lower Burma to Upper Burma. To avoid including a forest reserve in two districts, alterations in boundaries between the Myitkyina and Bhamo Districts and between the Myitkyina and Katha Districts were effected. Minor rectifications of boundaries were made in the Ma-ubin, Toungoo, Myitkyina and Henzada Districts. The Township limits of the Letpadan and Minhla Townships were revised.

With effect from the 1st April 1919, the Yamèthin Subdivision of the Toungoo Public Works Department Division was split up into the Yamèthin Subdivision with headquarters at Yamèthin and the Pyinmana Subdivision with headquarters at Pyinmana.

A new Subdivision, known as the "Twante Canal" Subdivision, was created within the Embankment Division, with effect from the 4th July 1919.

The Headquarters Subdivision of the Mandalay Division was split up into the North Subdivision and South Subdivision.

With effect from the 1st November 1919, the "Twante Canal" Subdivision of the Embankment Division was abolished and the Canal Works transferred to the South Embankment Subdivision. A new Subdivision known as "Waterways" Subdivision was constituted from the same date with headquarters at Kyaiklat.

The Subdivisions of the Myitkyina Division were reconstituted as follows:—

(i) Headquarters Subdivision.
(ii) N'Sop Subdivision.
(iii) Sadon Subdivision.
(iv) Mogaung Subdivision.
(v) Putao Subdivision.

In the Maritime Circle, a temporary Independent Subdivision, known as the Burma-Arakan Independent Surveys Subdivision, with headquarters at Rangoon, was formed with effect from the 17th November 1919. With effect from the 16th January 19.0, the Eastern Subdivision of the Akyab Division was temporarily reconstituted into the Eastern Subdivision with headquarters at Akyab and the Myohaung Subdivision with headquarters at Akyab.

Additions to and changes in the administrative staff.

3. With effect from the 1st February 1920, the Imperial and Provincial Services of the Public Works Department were amalgamated into one Service, designated "The Indian Service of Engineers." A new Provincial Engineers' Service, known as "The Burma Engineering Service," was formed with effect from the 1st February 1920.

Development Commissioner.—The Secretary of State sanctioned the appointment of a Development Commissioner for Burma on Rs. 3,500 *per mensem* as a temporary measure pending the consideration of the wider proposals in connection with the Reform Scheme. Mr. J. MacKenna, C.I.E., I.C.S., was appointed to this post and assumed charge on the 8th May 1920.

Forest.—Three new Forest Circles were constituted during the year; (1) the Delta Circle, a territorial charge comprising the western half of the old Pegu Circle—from the 2nd December 1919; (2) the Research and Working Plans Circle—absorbing the old Forest Research Division—with headquarters at Maymyo from the 3rd January 1920; (3) the

Utilization Circle with headquarters at Rangoon from the 1st February 1920. The main duty of the Conservator in charge of this Circle is to co-ordinate the commercial work of the Department.

Income-tax.—The Secretary of State sanctioned during the year the creation of permanent appointments of a Collector and an Assistant Collector of Income-tax for Rangoon. The appointment of a Collector will be filled on the termination of Mr. Holdsworth's appointment in March 1921 while that of Assistant Collector will be filled shortly by an officer recruited in England.

Veterinary.—The Local Government sanctioned during the year the addition of three Deputy Superintendents to the cadre of the Civil Veterinary Department. Effect was not, however, to be given to this addition till the financial year beginning 1st April 1920.

Police.—The District Police Establishments of the Myaungmya, Mergui and Lower Chindwin Districts were revised during the year, the net result being an increase of one Inspector, 20 Sub-Inspectors and 116 Head Constables and a decrease of 139 Constables. The object aimed at was to reduce the number of inadequately paid constables and to replace them by Head Constables and Sub-Inspectors. Accordingly Head Constables were allowed as Assistants to Investigating Officers and as beat patrols in many districts, duties which were hitherto carried out by Constables. On the 1st July 1919 the two extra temporary appointments of Deputy Inspectors-General were abolished and a new permanent range called the Northern Range with headquarters at Mandalay was established.

Owing to the continued shortage of officers sanction was accorded for a further period of two years, with effect from the 1st January 1920, to the retention of twenty additional Deputy Superintendents of Police.

Legal Remembrancer.—The arrangements for the performance of the legal work of the Local Government were revised and with the consent of the Government of India the new post of Legal Remembrancer and Secretary, Legislative and Judicial Departments, was sanctioned, as were also the appointments of Deputy Legal Remembrancer and Assistant Secretary, Legislative and Judicial Departments. Mr. H. E. MacColl, I.C.S., Divisional Judge, was appointed to the new post, the creation of which affords much needed relief to the Secretary to Government and to the Government Advocate. The Deputy Legal Remembrancer devotes himself to legislative work proper, the drafting of bills and the scrutiny, from a legal standpoint, of draft rules and notifications. He continues to be Secretary to the Legislative Council of the Lieutenant-Governor.

Relations with Tributary States and Frontier Affairs.

(*i*) *Shan and Karenni States.*

[*Southern Shan States*: 37 *States, area* 36,154 *square miles, population* 836,574, *tribute* Rs. 2,61,000; *Karenni*: *five States, area* 4,230 *square miles, population* 63,628, *tribute*

Rs. 5,350; *Northern Shan States: five States, area* 16,594 *square miles, population* 479,810, *tribute, Rs.* 1,65,500; *Möng Mit: area* 3,501 *square miles, population* 44,708, *tribute Rs.* 20,000; *Hsawnghsup (Thaungdut), area* 840 *square miles, population* 7,296, *tribute Rs.* 400; *Singkaling Khamti (Zingalein Kanti), area* 2,000 *square miles; population* 1,924; *tribute Rs.* 100; *Khamti Löng (Kantigyi) or Bhor Khamti, area* 200 *square miles, population (approximately)* 6,221, *tribute Rs.* 2,500 *(approximately).*]

The Southern Shan States.

4. A feature of the year was the retirement, after thirty years' service in the Shan States, of Mr. G. C. B. Stirling, C.I.E. This officer had won the esteem and affection of all ranks, and no part of His Honour the Lieutenant-Governor's speech at the Taunggyi Durbar evoked more enthusiasm than his references to Mr. Stirling's long and devoted service to the Government, the Shan Chiefs and their peoples. Two *Myosas* were removed from their appointments for misconduct. The private financial transactions of a third were sufficiently unconscionable to call for the interference of the Assistant Superintendent. The States have not been free from frontier troubles. In the north Möng Hpen was looted by a large band of dacoits from Möng Lem, and in the south the adjoining district of Chiengmai in Siam was terrorised by a band of Yünnanese brigands. Owing, perhaps partly, to the uncertainties of the political situation in China, brigandage is rife in Western Yünnan and Kēngtūng trembles at the names of several robber chiefs across the border, who are supposed to harbour sinister designs against the peace and prosperity of Kēngtūng State. The necessary precautionary measures have been made to meet possible trouble in the coming cold weather.

The sanctioned strength of the Southern Shan States Battalion, 1,130, remained unchanged, one Company of Gurkhas being replaced by a Company of Kumaonis. Discipline was good, but the Battalion Commandant points out that the shortage of British Officers makes it impossible for him to ensure the standard of discipline he would like to see enforced. Six men were dismissed and 18 deserted during the year. The most serious offence reported was the murder of a Jemadar at Kalaw by a Naik, who had been a comrade in arms of the deceased in Mesopotamia, and was jealous at his friend's promotion. For his gallantry in arresting the murderer Mr. Fearnley-Whittingstall, then acting Commandant, received the King's Police Medal.

The sanctioned strength of the Civil Police remained as before, 11 officers and 79 men. The cadre is considered inadequate in view, among other things, of the development of Kalaw. The health of the men has not been satisfactory and their housing calls for improvement. Within the jurisdiction of the Government Police there was a substantial decrease in crime of all classes, due to good preventive work on the part of the Police in the way of patrols, and the removal of undesirables from Kalaw. Cases reported fell by 25 *per cent.*, and excluding the murder referred to above, the only cases of violent crime were two unimportant robberies. The State Police would appear to have been less

successful, and the forces at Yawnghwe and Kēngtūng are reported to be under-paid and inefficient. An improvement in the standard of efficiency of the State Police is a matter of great importance, especially since, under the new Federation proposals, police administration will remain largely in the hands of the Chiefs. Violent crime, outside the jurisdiction of the Government Police, remained at the level of the previous year, murder being the form in which it most commonly appears. The high price of cattle has been a factor in raising the number of true cases of cattle theft by one-third. The animals are wanted for their meat, and the volume of this crime is considered as likely to increase if the Yawnghwe *Sawbwa* succeeds in inducing the other Chiefs to forbid the slaughter of all cattle. The number and value of civil suits filed in the Government Courts showed a slight decrease, while there was an increase in the number and value of those filed in the State Courts Of the total number in all Courts five-eighths were for money, and nearly all of these were for sums of under Rs. 100. There was only one case in which the subject-matter was valued at over Rs. 5,000. Suits for land increased. The percentage of confirmations was 56 in Government Courts, and 42 in State Courts: the work of the Courts is reported to have been well done.

The rains broke early, but were badly distributed, and the later rains were very short. Everywhere, except in Kēngtūng, the main *Kaukgyi* rice crop was badly affected, and the *taungya* crop was poor everywhere, except in the North-Eastern Subdivision. The average yield was less than one-half, and in some places less than one-third. In consequence there was a general rise in the price of rice, and Yawnghwe and the Myelat were driven to import from Burma Proper. Wheat and cotton did well in places, while gram, groundnuts, tobacco and betel were satisfactory crops The orange crop was excellent. The distillation of camphor was begun on a small scale on the Lawksawk estate.

There was little mortality among cattle in the Myelat or Yawnghwe. Rinderpest interfered with cultivation in Kēngtūng but the severest outbreaks occurred in the North-Eastern and South-Eastern Subdivisions. Kēngtūng also suffered from anthrax and surra, which attacked the ponies and raised the rates of transport. The Veterinary Assistants are reported to have done good work.

The Yawnghwe State Farm, which was established in 1915, conducted some interesting experiments in the application of green manure, in the use of which the solution of the *taungya* problem would appear to lie. Land ordinarily planted with paddy was found, after a liberal application of this manure, to yield magnificent crops of wheat in succession to potatoes. The cultivation of the latter crop has received special attention, and seven new varieties are being tested. Experiments with wheat selection have resulted in some good samples, which have been sent to India to be tested.

Forest Revenue again showed a marked advance. The Bombay-Burma Corporation increased their outturn of teak, though they are still suffering from the depletion of their staff owing to the war. For the quinquennial period there was a surplus of income over expenditure in the Forest Division of half a *lakh* of rupees.

Twenty-six original applications for prospecting licenses and five applications for renewal were before the authorities during the year. Six fresh licenses were granted, and two existing licenses were renewed. Three mining leases for silver and lead ore were in force. About half of the lead ore won was exported: a portion was absorbed by the local pottery trade. Other minerals worked were wolfram, antimony and red ochre.

The registered trade showed an increase of over 24 *lakhs* of rupees. Cattle were exported so profitably that the agricultural needs of the country were overlooked, and the hiring rate for the ploughing season rose threefold. Exports of silk into Burma, on the other hand, exhibit a steady decrease, and an effort is to be made to revive the industry. The steadily increasing quantity and value of glass work exported is interesting as showing the change in the standard of comfort of the people. The most noticeable feature of the transfrontier trade was the disappearance of the export trade in opium, owing to the increased cultivation of the drug in China.

Government expenditure on Public Works amounted to 3,19,000 rupees, most of which was laid out on communications. Some preliminary surveys of the Heho and Teng waterfalls were done for the Hydro-Electric Survey Party. Expenditure on Public Works from State funds advanced to Rs. 4,15,000, and here again special attention was paid to roads. It is interesting to find the State expenditure supplemented by private contributions amounting to over 4,000 rupees from individuals desirous of acquiring merit by making roads and bridges.

The total revenue of all States rose from 13·19 to 13·60 *lakhs*. The total expenditure was within some 4,000 rupees of the latter figure.

The health of the people was, on the whole, satisfactory. The States were visited by plague, but the only serious mortality, about 100 deaths, occurred in Yawnghwe. Slight outbreaks of influenza are reported. Small-pox claimed some victims, especially in the State of Maw. But by far the most serious enemy to health was malaria, which carried off 1,600 persons in the Yawnghwe State alone. The prices of commodities remained high, and producers have suffered little with the exception of the opium growers. A wise order of the Kēngtūng *Sawbwa* to the effect that these people must cultivate enough paddy for home consumption has, however, removed all fear of famine.

The Government staff for educational purposes consists of two Deputy Inspectors and two Sub-Inspectors of Schools. The department dealt with 91 schools with an attendance of 1,864 boys and 1,055 girls. Registered Monastic Schools, included in the above total, amount to 23,

with an attendance of 569. Of eighteen pupils in the Normal School at Yawnghwe fifteen passed their examinations. The American Baptist Mission and Roman Catholic Mission Schools all did well. An interesting development in the school for the sons of Shan Chiefs was the founding of an Old Boys' Association by Sao On Kya, son of the Hsipaw *Sawbwa*, who had just returned from Oxford.

The Karenni States.

5. The general health of the people was good. Revenue declined by some 72,000 rupees from the figures of last year, which, however, included nearly 50,000 rupees arrears of Forest Revenue. The Karen part of Naungpalè continued to be administered by Bawlakè, and the Shan portion by Kantarawadi.

Of 90 persons sent up for trial by the State Police only 41 were convicted. The recovery of stolen property was also disappointing: the figures are swollen by the inclusion of an elephant valued at Rs. 5,000, but, with this exception, less than a quarter of the stolen property was recovered. The total number of true cases reported rose by 3 to 152. Violent crime is represented by one murder, the victim of which was suspected of having caused the death of the murderer's relatives by witchcraft. Cattle thefts appear to have been common, though less than 25 *per cent.* of the new cases reported were brought to Court. The volume of other thefts and miscellaneous crime calls for no remarks.

Sixty-one new civil suits were instituted, of which all except seven were suits for money. The year opened and closed with a pending balance of eight cases, and the despatch of business was evidently punctual. There were no suits for landed property, and only one application for extradition.

The rainfall was scanty and capricious. *Taungya* crops did fairly well, but the lowland crop was a failure. The States were fortunately free from cattle disease, and in spite of the failure of the harvest, and the rise in prices, the people have suffered little. There is much lucrative petty trading and the Mawchi Mines Company and Messrs. Foucar employ a considerable amount of labour. The construction of Public Works put some 60,000 rupees into the pockets of the people. Teak revenue continued to decline, but minor forest produce gave a return of 17,000 rupees as against 4,000 rupees of the year before. This increase is due in part to a change in the system of collection, which is now made direct, instead of being sold by auction to farmers. The Mawchi Mines Company had a successful year. Though the amount of ore treated was less by some 2,000 tons than in the previous year, the amount of tin and wolfram concentrates obtained showed an increase of 300 tons. The improved result is due to the installation of additional ore dressing machinery. No prospecting licenses were issued.

Rs. 60,000 were spent on Public Works. The bulk of the money was expended on roads: a portion was spent on irrigation which has not achieved a conspicuous success. The largest item on the list is a sum of nearly 10,000 rupees for the completion of the palace of the Chief of Kantarawadi. The reserve funds of the two larger States now stand at nearly 2,58,000 rupees, and the last instalment of its Government loan has been repaid by Kantarawadi.

The Civil Hospital, Loikaw, treated 5,202 out-door and 129 indoor patients: the figures in each case show a decrease from those of last year. Mrs. Johnson of the American Baptist Mission treated 1,245 of her scholars or converts. There is again a marked decline in the number of vaccinations performed, which, in the year under report, amounted to 670 only. The Assistant Political Officer has made lists of the unvaccinated, and a special effort is being made to protect complete blocks of country one by one.

Forty-eight schools were dealt with by the Education Department as against fifty last year: twenty-five are Baptist, four Roman Catholic, and thirteen Monastic. Four women have been partially trained in weaving at Amarapura, and it is proposed to apprentice some boys to lacquer workers in Pagan.

The Northern Shan States.

6. The chief event on the frontier was an attack delivered on the 3rd of March 1920 by about 40 Kachins from across the Chinese border under the leadership of a Chinese-Shan named Eingda. The gang encountered a Lewis gun party of Military Police near Mu-Se, and killed two policemen. When the Lewis gun opened fire the attackers at once dispersed. Eingda had served as a clerk in the Shan States, and while in Government service had acquired a certain influence with Chinese-Shans and Kachins on both sides of the border. He and his chief assistant, Hkun Naw, are now reported to be living in Chinese territory, and the arrest of Eingda, who appears to be a man with exaggerated ideas of his own importance, is a matter of great moment if border tranquillity is to remain unimpaired. A heavy reward has been offered for his capture. In the Wa States on the east trouble has been given by an outlaw named Sao U Gaw, who, with assistance from a Wa Chief, attacked the State of East Manglün. A visit from the Assistant Superintendent with an escort of 25 rifles and a Lewis gun had the effect of restoring peace along the border. The Wa States, though technically in British territory, are not administered, the people are hardy and well armed, and show no inclination to accept British administration voluntarily, and the task of bringing their country under it is one that cannot for the present be attempted. One chief difficulty with the Northern and Eastern frontiers is the absence of good roads. If these could be constructed, and mechanical transport employed, it is conjectured that

the frontier could be placed in a state of security. At present the movement of troops must be slow, and is at certain times of the year altogether impracticable.

Additional taxation was introduced in North Hsenwi. The imposition in Hsipaw of a tax on orange trees of eight years and over has had the beneficial effect of forcing gardeners to replace old non-productive trees by new ones. The system of taxation in the Shan States is in need of revision. There is no survey, and the differentiation in assessment between the varying crops is capricious. The flourishing tea industry of Tawngpeng could well bear the burden of enhanced taxation; at present it is certainly paying less than its share to the revenues of the State. Arrangements have been made to train Shan surveyors, and the remedy for the existing inequalities would appear to be the establishment of a uniform land revenue system throughout the whole of the Shan States. One prime necessity is the encouragement of paddy cultivation.

The sanctioned strength of the Military Police Battalion was increased by 40 men and 38 mounted infantry ponies. The actual strength at the end of the year was 874. The discipline of the men, and their relations with the people have been satisfactory. The health of the men was good, there being only two cases of small-pox. Quinine was issued twice a week, and admissions to hospital fell from 1,118 to 651.

The sanctioned strength of the Government Civil Police remained at 128, but the force was short by six men at the close of the year. Discipline and conduct were on the whole satisfactory. The Lashio Training School is still in abeyance for lack of funds; 401 cases were dealt with, and convictions rose from 120 to 232. Violent crime decreased to negligible proportions: cattle theft, as usual, was probably less in volume than the number of reported cases would appear to indicate, since these include many cases of mere straying.

The State Police continued to show improvement in the percentage of convictions obtained, and of stolen property recovered. Violent crimes and cattle thefts were well handled; the most serious crime reported was the triple murder at Hsipaw of Chinese coolies left in charge of a rice mill in the absence of the owner. The motive was loot, and the case still remains undetected. There was no organised crime, and there was close co-operation between the Civil and the State Police, with satisfactory results. In the North Hsenwi State alone was the work of the State Police disappointing, and several prisoners were allowed to escape from custody. The work of the Village Police was excellent, and the decrease in cattle thefts along the frontier is attributed to their activities. The number of cases reported rose from 1,435 to 1,711, the increase occurring mainly in Hsipaw and Namtu. Adverse economic conditions also tended to swell the volume of criminal work at Hsenwi. The percentage of confirmations on appeal and in revision was remarkably high, and the

work of the lower courts was evidently good. The number of civil suits filed declined in the Government, and nearly doubled itself in the State, Courts, the general increase being due to the calling-in of outside debts during the hard times. The maintenance charges of the Hsenwi lock-up and the Hsipaw Jail show a considerable increase, due in the main to the enhanced price of rice. Jail earnings showed a marked rise at Hsipaw, and the average under-trial period of accused persons a satisfactory decline.

The rains started well, but the subsequent shortage in July and August affected upland and lowland paddy alike. Owing to the lack of rain, and the slackening of the Chinese demand, the outturn of opium decreased by one-third. It is the declared policy of the Local Government gradually to restrict the cultivation of opium to the amount actually required for domestic consumption, and it is hoped that the improvement of interior communications, by enabling cultivators to dispose of their surplus outturn of foodstuffs, will stimulate the production of the latter, and remove the existing temptation to cultivate opium, which alone at present possesses the advantage of having a market close at hand. Cotton, sessamum, sugar-cane and Indian corn were all below normal, but potatoes, ground-nuts and beans did reasonably well. Wheat continued to be grown on a small scale in Hsumhsai, and on a larger scale by the Hsipaw *Sawbwa* himself at Sakantha, with some success, though he was unfortunate in his harvesting operations. The Hsipaw orange crop was below normal and prices declined. The Hsipaw State Farm was closed down on account of the incompetence of the Agricultural Assistant. In view of the projected establishment of a central experimental farm at Lashio, the Hsipaw farm will probably not be reopened. The number of co-operative societies increased, but in the absence of Shan-speaking co-operative officials the movement is at present confined to Burmese-speaking Shans along the railway line.

Forest revenue declined from Rs. 1,26,820 to Rs. 1,01,677, owing to the late collection of grazing fees, and the existence of certain outstandings against the Burma Mines Company. Royalty on teak was small, but that on other timber showed a slight appreciation.

The operations and activities of the Burma Mines Company have been materially expanded. The new mill and the hydro-electric plant were nearing completion at the end of the year. 20,024 tons of refined lead and 2,418,927 ounces of silver were produced. Further progress was made in developing the Namma coal field, and the Man Ma Klang iron mine was connected by a tramway with the Burma Railways System. The company now employs 120 Europeans and some ten thousand Asiatics.

Communications are in urgent need of improvement, but it is gratifying to note that several *Sawbwas* take a keen interest in this important subject. In South Hsenwi the Public Works Department has received

considerable help from the State Engineer, and it is considered that an extension of the system to other States would greatly relieve the Executive Engineer, and tend to greater expedition in the construction of roads. The suspension bridge over the Nam *Hka* on the Hsipaw-Möng Tung road has been completed and opened to traffic. Of the total State expenditure on Public Works of a little over 9 *lakhs*, 5 *lakhs* represent expenditure on roads and 4 *lakhs* expenditure on miscellaneous works, the remaining objects being of a semi-personal nature.

There were minor outbreaks of plague at Hsipaw and Kyaukmè, and severe epidemics of small-pox in East Manglün, the Wa States and Hsumhsai. Rinderpest attacked the States of North and South Hsenwi, and Tawngpeng suffered from surra; Hsipaw and Hsumhsai showed a considerable decline in the ravages of both these diseases. Sericulture has met with great success at Lashio, and several branches of the experimental farm were opened at other centres. A branch of the American Baptist Mission weaving institute of Nawngsang has been opened in the Nam Paw valley and State weaving schools have been set up in Hsipaw and Tawngpeng. On the whole, the condition of the country was prosperous, but its inhabitants lack initiative, and the development of its great natural resources must await the foreign capitalist, a condition precedent to whose advent must be the provision of adequate communications.

The total revenue of the States amounted to Rs. 18·31 *lakhs*, and the total expenditure to Rs. 17·52 *lakhs*. The increase of two *lakhs* in receipts is mainly due to the collection of arrears of opium tax and the imposition of a paddy tax by the North Hsenwi State. The same State, which deposited a *lakh* and a half more than usual in the Public Works Department fund, is the chief contributor to the increase of 2½ *lakhs* in expenditure. General administration charges also showed a rise, due to grants made to meet the increased cost of living.

There was a marked improvement in the public health, and admissions to hospital declined. Sanitation has been improved at Panghai, and Hsipaw only lacks a pure water-supply to reach a high level in this respect Vaccination has now fought down opposition, and the greater part of the States is protected against small-pox.

Anglo-Vernacular schools were opened at Lashio and Namtu. There are indications that the Shan people generally wish to eliminate Burmese as a medium of instruction, but no progress can be made in this direction till a well-trained cadre of Shan instructors is forthcoming, as it doubtless will be in due course.

Other Shan States.

7. The Möngmit State once more had an uneventful year, and its tranquillity remained undisturbed by events in the neighbouring Chinese Shan States. Rainfall was poor and untimely, and the harvest much below

the average. Receipts of revenue fell to Rs. 2·11 *lakhs*, and expenditure to Rs. 2·10 *lakhs*.

There was a mild epidemic of influenza, which caused 25 deaths in the Shweli area, and a few deaths from small-pox were reported from the Ngadaung Hill Tracts. Cattle disease diminished.

Convictions were obtained in 85 out of 158 criminal cases reported, the percentage of convictions showing a slight improvement over last year's figure. Of twenty-three cases dealt with by the Superintendent on revision, one remained pending: in all the rest the lower court's decision was upheld. The number of civil suits instituted fell to 67, but the value of the subject matter increased to Rs. 12,000. There was a slight decrease in the expenditure on Public Works.

In the Kodaung Hill Tracts influenza continued in a modified form, but was sporadic rather than epidemic in its incidence. There was no violent crime during the year, and only 50 criminal cases were before the courts. There has been a steady increase in the number of fresh civil suits instituted from year to year, as it is being discovered that legal proceedings are quicker, and generally more satisfactory, than the settlement of cases by village elders. A successful recruiting campaign was carried on with the aid of the Assistant Superintendent, Mr. Cameron: the Divisional Recruiting Officer was thoroughly satisfied with the Kachin recruits obtained.

In Hsawnghsup a hill tract inhabited by Kukis has been ceded by the *Sawbwa* for Rs. 4,000 compensation, and included in the Somra tract. The village of Hsawnghsup was nearly destroyed by fire in April 1920 and a loan was issued by Government to assist the sufferers. Singkaling Kamti had an uneventful year, and the establishment of a military police post at Kamti during the open season has had an excellent effect upon the neighbouring Naga Tribes.

(*ii*) *The Chin Hills.*

The Chin Hills proper, area approximately 8,000 square miles, population 119,556, the Pakôkku Hill Tracts, area approximately 2,200 square miles, population 17,118; Hill District of Arakan, area 1,500 square miles, population 22,234; and tracts in the Upper Chindwin, Akyab and Kyaukpyu Districts.

8. After the troublous times through which the Chin Hills had recently been passing, owing to the Haka rising of 1917-18, and the Kuki rising of 1918-19, the year witnessed a reversion to a more normal and peaceful state of affairs. In the Chin Hills proper, the Lawhtu and Maram rebels had not yet been brought to submission by the close of the year, but the establishment of a military police post at Lotaw, in the neighbourhood of their tribal territory, seems to have been effectual in reducing them to quiescence, and it is hoped that the futility of further resistance will shortly be borne in on them, if the proposals for dealing with the unadministered territory, which lies between the Chin Hills and the Lushai Hills,

materialize, and deprive them of a base of operations, of which they are now able to avail themselves with some impunity. In the Somra Tract the Assistant Superintendent (Mr. H. Rundle) was able to visit all the Kuki villages, and communications have been opened up, and buildings erected for the military posts, which will have to be temporarily maintained in the tract without hostile interruptions There seems no reason to suppose that the Kukis and Tangkhul Nagas will not eventually accommodate themselves, as other tribes have done, to the light control which our frontier administration will impose upon them But *festina lente* should be the keynote of the policy followed, and it would not be wise to introduce them to the restraints of that control before they have had time to realise its advantages. There can be no doubt that incessant requisitions for labour have been responsible in the past for much of the discontent in the Chin Hills, and Government has decided to adopt the policy of keeping demands for labour within the lowest possible limits. In particular, the rationing of Military Police posts will in future be carried out, wherever possible, by mule instead of by coolie transport.

Now that peace has been restored, it has been possible to show clemency to the misguided Haka Chins who were sentenced to long terms of transportation and deportation in the preceding year. Fourteen chiefs and others who were serving sentences in the Myingyan Jail have been sent to Taunggyi as deportees instead, and nineteen deportees have been permitted to return from Taunggyi and Lashio to their homes in the Chin Hills. The cases of the remaining rebels will be reconsidered annually with a view to their eventual release during the next two or three years. The question of extending similar clemency to the Kuki rebels will be considered next year, if the Somra Tract is found during the ensuing cold weather to have settled down into a state of tranquillity, such as to make a recrudescence of the troubles of 1918-19 improbable.

With regard to the great dissatisfaction, which is said to prevail amongst Chins, who served in the Chin Labour Corps in France, owing to their not being paid the full amounts said to be due to them, a full inquiry was held by Mr. N. B. Naylor, Assistant Superintendent. His report was transmitted to the military authorities, by whom it has been most sympathetically treated. It does not appear that these men have anything strictly owing to them under the rules ; but the question is one of making certain concessions to them in consideration of the special circumstances in which they were recruited.

It is hoped that the matter will be speedily settled, and that this dissatisfaction will in no wise interfere with the recruiting of Chins for the army, which, after being suspended for two years in consequence of the Haka rebellion, is shortly to be re-opened in the Tiddim Subdivision. The recruiting of Chinboks, who are doing particularly well at Maymyo, is progressing satisfactorily in the Pakôkku Hill Tracts. There is no doubt that the Chins possess solid soldier-like qualities, and if they can be

persuaded to supply a battalion or two to the army which Burma will one day raise for the defence of her own frontiers, the cost of administering the Chin Hills will be more than compensated.

Education in the Chin Hills is making slow but steady progress. The school at Mindat in the Pakôkku Hill Tracts seems to be doing particularly well, owing to the energy and enthusiasm of its Burmese headmaster. Instruction in carpentry and masonry is an important feature in the curriculum of these schools; it would be a pity if the carpentry class at the Falam Technical School had to be abandoned on the ground that the Chin cannot compete with the Chinese carpenter. The hospitals established at the various posts play their part as a civilising factor, and it is satisfactory to note that there were 1,106 vaccinations in the Tiddim Subdivision (which unfortunately suffered from small-pox, as well as from severe outbreaks of cholera and virulent malaria), and that in the Somra tract both Kukis and Tangkhuls came to the Military Police posts in large numbers, to be vaccinated.

In the Chin Hills proper the monsoon broke late, and crops generally were poor. Crime was conspicuous by its absence, though an unimportant raid and one or two murders are reported. Foodstuffs commanded abnormal prices. The year was uneventful in the Pakôkku Chin Hill Tracts, where the rainfall was abundant. This territory received a visit from the Commissioner of Magwe for the first time since 1914. The Somra Tract, which was brought under regular administration during the year, was quiet: an epidemic of small-pox caused heavy mortality. The mule tracks cut during the operations, some 200 miles in length, were opened up at the close of the rains, partially bridged, and considerably widened. Five wire suspension bridges were erected over the Namwe river. The energies of the Deputy Commissioner, Hill District of Arakan, were mostly absorbed in the interesting tour made by him to Laki in unadministered territory in February 1920, where he met Mr. W. L. Scott, I.C.S., the Superintendent of the Lushai Hills, for the purpose of discussing the future boundary between the Lushai Hills and the Arakan Hill District. It was not deemed advisable to have a similar meeting between the Superintendent of the Lushai Hills and the Chin Hills officers, as it would have involved touring through disaffected tracts, or else making wide detours on which much of the open season would have been wasted. No raids were committed on administered territory by trans-frontier tribes. The administered village of Gaiza was raided by another administered village, Bwelu, as the result of a petty quarrel between a husband and wife. A man, two girls and property worth Rs. 49 were carried off from Gaiza, but the Circle Inspector, who happened to be in the neighbourhood, took immediate action, and recovered the captives and a portion of the property. The price of rice was high and the Deputy Commissioner has been urging the people to cut larger *taungyas* and to reduce the quantity of grain used by them in the manufacture of their rice beer.

Agricultural loans to the value of Rs. 10,000 were issued. The first instalment of the subvention of Rs. 15,000 granted by Government for the improvement of communications was spent in converting a foot-path 30 miles in length into a six-foot bridle-path.

Outstanding problems relating to the Chin Hills were discussed at a conference held at Maymyo at the beginning of May 1920, to discuss the future policy of Government in respect of the unadministered territory. The decision provisionally arrived at (the matter is one on which a final decision does not rest with the Local Government) was, that the more or less imaginary line, which divides administered from unadministered territory, should no longer be recognised, that Government officers should be at liberty to enter what has hitherto been unadministered territory, for the purpose of punishing evil-doers, and that the whole of the territory should be brought under administration by gradual stages. The Superintendent of the Lushai Hills attended the conference, as the representative of the Assam Administration, and provisional arrangements were also arrived at, as to the portions of the territory which should in future fall within the sphere of influence of the Lushai Hills, the Chin Hills, the Pakôkku Hill Tracts and the Hill District of Arakan, respectively. Once unadministered territory ceases to be no man's land, much closer co-operation will be possible between the Frontier officers, who have charge of the areas which surround that territory, and the inhabitants should soon be induced to abandon their love of raiding their neighbours, which is at present so fruitful a source of unrest in these regions. In this connection the importance of improved communications cannot be over-estimated. Special attention must be given to the opening up of roads connecting the Chin Hills with the Lushai Hills, and a road connecting the Hill District of Arakan with the Pakôkku Hill Tracts would be of great administrative convenience.

(*iii*) *The Kachin Hills.*

[*The Putao District and Tracts in the Myitkyina, Bhamo and Katha Districts.*]

9. The outstanding event of the year on the north eastern frontier was the attack on the Tunhong Military Police Post (a mile or two from the Chinese frontier) on the 3rd December 1919, by a band of Shans, whose number was estimated at the time at forty. For several years past Burmese princes and others, who had refused submission at the time of the annexation, have been living in exile in Western Yünnan. These men would seem to have been the figure heads in the plots against the British Government, of which the attack on Tunhong was the result, but the moving spirits were two Chinese-Shans named Li Ming Ch'ing and Tai Hsueh Ch'ang, and a certain Chinese-Shan Monk whose identity is not very certain. Warnings of the plot had been received at the beginning of November, but no effective action could be taken to nip it in the bud,

because of the lethargy of the Chinese-Shan *Sawbwas* and the slenderness of the control which the Chinese Government possess over these border States. But the local officers were prepared; the Deputy Commissioner, Bhamo, was at Tunhong when the attack came, and it was very promptly repulsed with a loss to the raiders of five killed and ten wounded. The attackers were poorly armed, and our only casualty was one Military Policeman wounded in the cheek. The incident did not prevent the holding of the annual Frontier meetings at Sima and Nawngma.

Few cases of violent crime were reported during the year: two dacoities in the Htawgaw jurisdiction were the work of Chinamen from across the border. Criminal cases increased in Putao and Katha and declined in Myitkyina and Bhamo. The variations are so slight as to call for no comment. There were only two cases of deportation under the Kachin Hill Tribes Regulation. Nine appeals were heard by the Commissioner, Mandalay, and in all the sentences were confirmed; ten cases were called for in revision, there was interference in two cases and a third was submitted to the Local Government for orders as to remission of sentence. The administration of civil justice calls for no comment. In Putao the number of suits instituted fell from 59 to 19; this is attributed to the headmen being made to settle petty civil cases, which in the past were decided by the Assistant Superintendent.

Tribute was levied at the same rates as last year, and was collected without difficulty. There was a decrease in the total collected of Rs. 1,334. The Myitkyina District is chiefly responsible for the decline, but no comparison is possible, owing to alterations in charges.

No opium or liquor shops were licensed in the Kachin Hills. The price of opium fell, and the present appears a favourable opportunity for initiating the policy of total prohibition with regard to its cultivation. Special attention was paid by the Commissioner to the encouragement of regeneration on hillsides which have been denuded by excessive *taungya* cutting; the alder has been found a suitable tree in many places, and experiments are being made by the Divisional Forest Officer to ascertain which species are best suited to the varying elevations.

The amber mines in the Hukong Valley, which were formerly worked by the slaves of Kachins, have been closed down owing to the scarcity of labour. The jade industry was brisk and a *lakh* and a half of rupees were paid as royalty on 1 *lakh* viss of jade. Good progress was made in the improvement of communications.

Condition of the People.

10. The agricultural season was a bad one: for almost every crop it promised well, and for almost all it turned out badly. In Lower Burma the early and middle rains were generally satisfactory, but the late rains,

deficient. In Upper Burma, although the early rains were ill-distributed, the middle rains were good, but the late rains were almost everywhere a failure. Though not so unhealthy as its predecessor, the year 1919 was far from satisfactory so far as public health is concerned. The influenza epidemic did not spend its force till nearly the end of the year. Cholera visited all districts, and caused the highest mortality recorded since 1915; small-pox was also prevalent, and the one satisfactory feature was the decline of the mortality from plague. Rinderpest again wrought considerable havoc among the cattle of the Province, the death-roll being estimated at 52,000, or more than double the figure recorded for the previous year. There was no marked change during the year in agricultural conditions, except for the general rise of prices, which all have in some degree felt, but which benefits only a comparatively small proportion, mostly of the wealthier classes. The economic situation was reflected in the increase of crime, especially of offences against property. Except as regards the last named feature, the condition of the people exhibits no great change from its condition in the previous year and may be described as generally satisfactory.

CHAPTER II.

ADMINISTRATION OF THE LAND.

REFERENCES—

Report on the Land Revenue Administration of Burma during the year ended the 30th June 1920.

Land Records Administration Report of Burma for the year ended the 30th June 1920.

Agricultural Statistics of India, Volume I.

Realisation of the Revenue.

Changes in the Law, Rules and Directions.

11. There were no changes in the Lower Burma Land and Revenue Act, or in the Upper Burma Land and Revenue Regulation. The following are the more important changes in the Rules and Directions made under these enactments. The date of collection of the early paddy assessment was made the same as that of the main crop assessment. The collection of the assessment on miscellaneous island crops and hot-weather paddy at the same time was permitted in any district with the approval of the Commissioner. The exemption from *thathameda* and capitation-tax of immigrants to Burma for two years after arrival was restricted to immigrants of the agricultural and labouring classes. A notification under the Lower Burma Act exempted *ex*-headmen, who have rendered not less than ten years' approved service as village headmen, from the payment of capitation-tax. Exemption on the same terms was granted in Upper Burma to former holders of the office of headman or *ywagaung*. Steps were taken to simplify the finding of security for the payment of fishery-rents. Thus compact geographical areas of homogeneous and contiguous fisheries were allowed to be disposed of by groups, the purchasers of the leases in each group forming a Co-operative Society, or giving mutual security for one another. The personal security of a purchaser was declared to be good to the limit of Rs. 500; the maximum security to be furnished in the case of any fishery was fixed at two-thirds of the annual rent, and the security of a co-operative society of fishermen was accepted in lieu of all other security for fishery rent. Power to issue prospecting licenses for areas not included in a forest reserve has been delegated, subject to superficial limits, to Commissioners and Collectors. Emergency legislation in connexion with the wolfram industry has been withdrawn.

Demand, collections, remissions and outstandings.

12. The total current demand from all heads of revenue was Rs. 5,00,84,773 against Rs. 4,91,37,317 for the previous year. Collections amounted to Rs. 4,82,68,411. This is over 18 *lakhs* less than the total demand. Remissions account for Rs. 12,04,148 of the shortage, and outstandings for Rs. 6,13,630. The postponement of the date for the payment of main crop revenue accounts for a considerable part of the outstandings. The capitation-tax and *thathameda* demand remained practically stationary. Fees, rents and royalties on "other minerals" fell heavily, owing to the wolfram slump, but increase in collection on petroleum, rubies, jade and amber more than made up the deficit. Land revenue increased by three *lakhs*. The total collections show an increase of nearly 12 *lakhs* over last year, and as the carry-over from last year in the form of outstandings was less than 2 *lakhs*, while the carry-over this year is nearly 6 *lakhs*, the financial progress of the province may be regarded as satisfactory.

Excluding the amount credited to cess and irrigation, the demand for the year 1919-20 was Rs. 317·4 *lakhs*, an increase of Rs. 3·09 *lakhs* over the previous year. The increase is slightly below the average, but the season was one of the worst that has been experienced for many years.

The Arakan Division as a whole suffered from drought in the later months of the rains. In Sandoway and Northern Arakan the area assessed remained practically stationary, while Kyaukpyu and Akyab showed a decrease. In the case of the latter, however, the decline in area was accompanied by a rise of over one *lakh* in the demand, owing to the introduction of new rates. The theoretical demand on the new scale would have shown an increase of nearly 5 *lakhs*, but certain remissions and rebates were granted to mitigate the hardship, which would have been entailed by insisting on full revenue at the new rates in a bad year.

In the Pegu Division, the Hanthawaddy, Insein and Tharrawaddy Districts exhibit an increase of revenue, due to extensions of cultivation. Two-thirds of the increase in the Pegu demand is ascribed to the introduction of revised rates in Nyaunglebin. Prome shows a serious fall both in the average assessed, and in the demand. Drought prevailed over the whole district, and epizootics and epidemics added to the troubles of the inhabitants.

In Irrawaddy special surveys and normal extensions raised the demand in the Bassein District. Revision and special surveys account for a similar increase in Henzada. The rise in the assessed area of the Myaungmya District is due to an accession of territory at the expense of Ma-ubin and to extensions of cultivation. The large increase in Ma-ubin is due to the new Yandoon Embankment, and has helped to

swell the demand by Rs. 27,000, in spite of a somewhat unfavourable season. Pyapôn enjoyed a good year, and ordinary extensions produced a rise in both the area assessed and in the demand. The division as a whole shows an increase of 2·14 *lakhs* in the revenue demand, or two-thirds of the total provincial increase.

In the Tenasserim Division the area assessed in the Toungoo District increased by nearly 20,000 acres, and the demand by Rs. 34,000. Salween remained stationary. Thatôn reported a large increase in the area assessed, but severe flooding in the Pa-an Subdivision prevented a commensurate enhancement of the demand. In Amherst rubber and hot weather paddy were the crops which chiefly contributed to the rise in the demand. The counter attractions of work at the mines are responsible for a slight decrease of the assessed area of the Tavoy District. In Mergui *taungya* areas diminished, and the increased demand of Rs. 14,500 is ascribed to rubber grants and leases having fallen due for assessment.

Magwe Division experienced a disastrous year. The rice crop was a complete failure in Thayetmyo, and other crops suffered considerably. Pakôkku was more fortunate, and assessed area and demand alike exhibit a slight increase. Minbu suffered from deficient rain in the early months, while drought in September and October caused a widespread failure of crops in the Taungdwingyi Subdivision of the Magwe District.

The demand in the Mandalay Division showed a very slight advance, while acreage remained stationary. Mandalay District enjoyed a better year than the previous one ; all crops showed an increase, except island crops, which were badly damaged by a very severe hail-storm in January 1920. In Bhamo hot weather paddy was damaged by floods, and the main rice crop by insufficient rain. Myitkyina District showed an increase in the demand, due to an increase in the area assessed, and to higher commutation rates under the lump sum assessment system. In Katha and the Ruby Mines unfavourable rains led to a slight decrease in the demand.

In the Sagaing Division the area under assessment increased by 85,986 acres, and the demand by Rs. 1·17 *lakhs*. Extensions of cultivation in Shwebo are due to the opening of the Ye-u Canal. High prices stimulated the cultivation of cotton, millet and groundnuts in Sagaing. The increased demand in the Upper Chindwin occurred outside the area under supplementary survey and was due to a rise in the market value of paddy, which led to a high conversion rate.

In the Meiktila Division, Kyaukse District suffered from shortage of water in the irrigated areas, and much land went out of cultivation. In other areas high prices encouraged the extension of dry-crop cultivation. Floods destroyed hot weather paddy in Meiktila, while the main crop failed to get rain at the time of maturity. The increased demand

in Yamèthin was due to natural expansion, extension of sugarcane and the bringing of certain remote tracts under regular assessment. The decrease in the assessed area of Myingyan is due to drought.

The figure for remissions was still abnormally high, though it shows a decrease of over 4 *lakhs* from the exceptional figure of the preceding year. In three districts remissions exceeded one *lakh*, namely in Tharrawaddy, Ma-ubin and Amherst. Drought was the cause in the first case, and floods in the other two. In Akyab and Kyaukpyu cultivators surrendered land on the margin of cultivation rather than pay the revenue, and considerable sums were written off as irrecoverable. In Hanthawaddy, Bassein and Myaungmya money had to be written off on account of *taungya* cultivators who reaped early, sold, and then absconded. Remissions in Mergui were more apparent than real. It is the practice of applicants for rubber grants to start clearing and planting in anticipation of the receipt of their title deeds containing the eight years' exemption clause. In the meantime they are naturally assessed to revenue. Special Remission Myoôks were required in eleven districts and the work of remission was generally well done.

The total collections of current land revenue were nearly three *lakhs* in excess of the previous year. The experiment of postponing the date of the commencement of collections of the main crop revenue assessments until March 7th met with considerable success. Its object was to enable cultivators to hold up stocks in order to take advantage of the expected rise in the price of paddy towards the end of March. Many districts reported that the postponement both helped the cultivators and facilitated collections. The outstandings for the year were three times as large as those of the year before. The Prome District alone, which, as noted above, had a most disastrous season, accounts for practically the whole of the increase. Hanthawaddy, Pyapôn and Thayetmyo in Lower Burma had no outstandings at the close of the year, while in Upper Burma the only districts recording outstandings were Pakôkku, Minbu, Magwe, Mandalay, Shwebo, Kyauksè and Myingyan.

The total area returned as fallow was 777,857 acres, or 15,000 acres less than in the preceding year, of this total 342,505 acres were assessed at the full rate, 423,489 acres at the two-anna rate, and the balance at intermediate rates. The decrease may be ascribed to the more favourable conditions prevailing at the beginning of the season.

Revenue proceedings and coercive processes.

13. The amount of revenue for the realisation of which application was made was Rs. 10·72 *lakhs*, a decrease of 2¼ *lakhs* on the previous year. Seventy-eight *per cent.* of the amount applied for was realised, as compared with 81 *per cent.* in 1918-19. The number of notices issued decreased by nearly 10,000 from last

year's unusually high figure. Warrants of arrest show a slight decrease, and the present figure is below the average of the last 20 years. Commitments to jail rose from 3 to 16. Resort to coercive processes was mainly necessary in the case of fishery, *thathameda* and capitation-tax revenue. In Akyab and Sandoway assessees appear to have been under the impression that if they abstained long enough from payment the wholesale remission granted in 1918 would be repeated. One hundred and fifty-six arrests were made in the former district, while in the latter 7 defaulters were actually committed to jail. In Henzada the indiscreet issue of warrants of attachment of immoveable property led to a rise under that head. The increase in the number of sales of such property occurred chiefly in two townships, where squatters had abandoned their holdings after harvest, and the land had to be resumed. In Amherst special difficulty was experienced in the collection of garden land revenue, and in Pakôkku the increase of warrants of attachment of immoveable property was due to the difficulty of recovering house-building advances, which had originally been given out with little care. In Upper Burma there was, as usual, little need for coercive processes. Mandalay and Meiktila again recorded the highest number of processes issued, and the former district was responsible for 20 out of the total number of 60 sales of property which took place in the Upper Province.

Surveys.

Surveys by Imperial Agency.

14. Topographical survey operations were continued during the year under report by Nos. 10, 11 and 21 parties of the Survey of India in the Myitkyina, Putao, Katha, Meiktila and Upper Chindwin Districts, in the Southern Shan States, in unadministered territory adjoining the Upper Chindwin and Myitkyina Districts of Upper Burma, and in the Mergui and Hanthawaddy Districts of Lower Burma. An area of 4,628 square miles, including 124 square miles of reserved forests, was surveyed on the ½-inch, 1-inch, 2-inch and 4-inch scales, and a special survey of 100 square miles on the 3-inch scale was carried out on the left bank of the Rangoon River between Syriam and Kyauktan, in the Hanthawaddy District. Triangulation and traversing were carried out in the Myitkyina, Katha and Meiktila Districts the Southern Shan States and in unadministered territory adjoining the Upper Chindwin District of Upper Burma and in the Mergui District of Lower Burma including Lampi Island, with a view to detail survey being extended into those areas next season.

During the year tidal operations were continued by No. 16 Party (tidal) at the following ports :—

(1) Rangoon. (2) Moulmein.

The Tidal Observatories were inspected and the tide gauges were cleaned, adjusted and left in good working order. In addition, the site proposed for a tidal observatory at Tavoy was inspected, but was found to be unsuitable, and no other site was found which was likely to fulfil the conditions necessary for a tidal observatory; the matter was then dropped by the Burma Government.

The Magnetic Observatory at Toungoo was visited and magnetic observations for the comparison of instruments were taken. The repeat stations were observed at for determining the secular changes in the magnetic elements, *viz.* Myitkyina, Bhamo, Lashio, Mandalay, Akyab, Prome, Moulmein, Bassein, Tavoy, Kindat, Kalaw and Victoria Point.

Surveys by Provincial agency-extension and revision surveys.

15. The Special Survey Party continued working on revision and extension of the existing cadastral survey, and on surveys for the Forest Department. An innovation was the importation of Indians from Hazaribagh and elsewhere to work as chainmen. The only revision survey conducted was in the Toungoo District, where 414 square miles were surveyed. Detachments of the party visited Bassein, where they performed traverse and cadastral work under the local Superintendent. The cost of the Toungoo Survey worked out to Rs. 124-6-0 per square mile, and Re. 0-4-8 per occupied acre. The figures for the traverse survey in Bassein were respectively Rs. 39-12-0 and Re. 0-1-6; for the cadastral survey they were Rs. 97-11-0 and Re. 0-3-0. Detachments of the same party conducted original extension surveys in Toungoo and Mandalay. For the former district the cost was Rs. 253-1-0 per square mile, for the latter Rs. 222-13-0. Per occupied acre the cost was respectively seven and fifteen annas. The local staff in the various districts revised the survey of 377,737 acres of occupied land, just 100,000 acres less than in the previous year. In Mergui rubber leases to the extent of 5,518 acres were surveyed by the local staff in addition to the 5,000 acres surveyed by the special party. The large areas of land annually resurveyed in the Henzada, Thayetmyo, Tharrawaddy and Pakôkku Districts call for remark.

Town and fishery surveys and surveys of leased areas.

16. Town surveys were carried out in Mandalay and Myittha. In the case of Mandalay work started late, and only the traverse was completed. At Myittha, where the traverse had been completed some years before, progress was made with demarcation and cadastral work. There were no fishery surveys during the year, but a detachment of the special party continued the survey of the delta forests for the Forest Department, better arrangements were made for the comfort of the men, and there was

much less sickness than last year. Surveys for the issue of grants and leases required a special staff in the four districts of Kyaukpyu, Thatôn, Amherst and Tavoy. Elsewhere they were dealt with by surveyors on the regular establishment. The increasing magnitude and importance of these surveys is worthy of remark. Figures for the year include applications for 80 and 100 acres in Akyab for cotton and cocoanuts respectively; leases of 500, 800, 2,500 and 7,000 acres for rubber in Thatôn, and applications for 1,500 acres for lemon-grass, and 3,000 acres for rubber in Amherst.

Settlements.

Progress of Settlements.

17. During the year ending on 30th June 1920; four parties were engaged on settlement operations in five districts (Myaungmya, Minbu, Kyauksè, Shwebo and Tavoy). The work covered a gross area of 7,403 square miles, of which approximately 2,088,000 acres were under occupation. During the year soil classification and connected operations were completed over a gross area of 2,197 square miles, comprising an approximate area of 573,000 acres.

The Settlement operations in the Myaungmya District, commenced by No. 2 party in November 1916, were completed at the end of 1919. Field work had been completed during 1918-19, and during the year under report the work was confined to the compilation of statistics and the writing of the report. The latter was submitted in December 1919, and reviewed by the Settlement Conference in the following June.

The third settlement of the Kyauksè District was commenced by No. 3 party in June 1919. The Settlement Officer's services were suddenly requisitioned by the Military authorities a few days after he had assumed his duties, and the Deputy Commissioner was placed in temporary charge of the party. From October 1919 a regular settlement officer was once more in charge. A period of two and a half years has been fixed for the completion of this settlement, and satisfactory progress has been made. Soil classification and connected operations were carried on over a gross area of 307 square miles, including 150,000 acres of occupied land.

The second settlement of the Shwebo District was started by No. 5 party in November 1918, a period of four years being allowed for the operations. During the year experiments in crop-measurement were conducted over the whole district, and soil classification and connected operations were completed over a gross area of 1,323 square miles, comprising 240,000 acres under occupation. An extension for one year has been sanctioned since the close of the year, as work was disorganized during the initial stages by illness and other causes.

The work of reclassification of the area irrigated by the Môn Canals in Minbu, was continued. At the beginning of the year the Deputy

Commissioner, who had been in charge of the operations, took leave, and for five months the party remained under the Assistant Settlement Officer till a regular Settlement Officer was appointed in November. Soil classification and connected operations were carried out during the year over an area of 98 square miles and an occupied area of 49,000 acres.

The second settlement of the Tavoy District was begun in November 1919 by No. 2 Settlement Party. A period of one year was allowed for this settlement, and by the end of May 1920 the field work had been completed. Satisfactory progress in the compilation of statistics was made during June. The total area for settlement covers about 469 square miles, including an occupied area of approximately 134,000 acres.

Financial Results and Expenditure.

18. No new rates were sanctioned during the year. The total expenditure during the year on all settlement parties at work was Rs. 2·69 *lakhs*. The cost of field work completed works out to Rs. 113 per square mile, or annas 6 per occupied acre.

Land Records.

Area under Supplementary Survey.

19. The rural area under supplementary survey was 50,224 square miles against a total of 50,342 square miles in the year before. The decrease is due to the abandonment of supplementary survey over 45 *kwins* in the Minbu District, on the introduction of the system of fixed assessments. The occupied area increased from 17,512,332 to 17,651,643 acres: every district contributed to the rise except Akyab and Kyaukpyu; in the latter district, as in Prome and Hanthawaddy, adverse conditions reduced the area under cultivation.

The area under supplementary survey in towns remained unaltered. Several districts report large increases in the area occupied, Bassein, Pegu and Kyaukṣè being chiefly responsible. In twelve districts the occupied urban area decreased. The total land revenue and rent and land rate rose by just over 1 *lakh* to Rs. 14,86,935. The increase at Pegu is due to the assessment by the Land Records Department of sites previously assessed by the Municipality: elsewhere the changes under this head reflect changes in area or survey. Municipal assessments prepared by the Land Records Department advanced by Rs. 63,000 to Rs. 7,37,553. The largest increases, in Tharrawaddy and Ma-ubin, result from the transfer of the machinery of assessment from the Municipalities to Government. The decrease in Minbu was due to fire.

Cost of Supplementary Survey.

20. The total cost of supplementary survey, excluding charges for provincial administration, was Rs. 16,25,988 as compared with Rs. 15,85,390 for the year before. There was a decrease in the charge for superintendence, and the increase of Rs. 40,000

in the total cost is almost entirely due to the grant of temporary allowances to meet high prices, sanctioned from 1st July 1919. The staff of surveyors has been increased by 13 men. The provincial total cost is 4·36 *per cent.* of the revenue assessment, an increase of ·08 *per cent.*

Training of Officers.

21. Three probationers completed their course, and seven remained under training. The number of survey schools remained unchanged at 18 : there was an increase in the number of pupils from 217 to 241. One hundred and forty-seven of these were free pupils. The total expenditure was Rs. 41,436, with an income of Rs. 2,270. The average net cost for each pupil declined to Rs. 162. The course of study has been entirely revised, as it was considered in its original form to tend rather to cram the pupils for examinations than to turn them into practical surveyors. The old school year, which ran from May 1st to the end of March, with a brief interval before the Syndicate Examination, allowed no time for prolonged training in actual survey in the field. Under the new system the term begins on July 1st, and the period till December is devoted to the class-room. At the end of December the whole school go into camp for three months' practical training, which is followed by a test. Pupils failing to pass this test are not allowed to sit for the literary examination. Schools break up for the Burmese New Year, and pupils have then six weeks in which to study for the Syndicate Examination in revenue law, arithmetic and survey. The results of the new system, to judge from the first examination held under it, are satisfactory.

The number of apprentices under training at the beginning of the year was 270, but resignations and removals reduced it to 231, or 25 less than the final figure for the previous year. The training was on the whole well carried out, and final proficiency certificates were awarded to 80 *per cent.* of the number examined. One hundred and four certificate-holders were appointed permanently during the year, and the services of 244 were utilised in leave vacancies.

Transfers of Land.

22. The area over which agricultural statistics were collected during the year rose from 17,501,000 to 17,652,000 acres. The area sold increased from 480,000 to 592,000 acres, and the area disposed of by non-usufructuary mortgage from 449,000 acres to 451,000 The area redeemed advanced from 245,000 to 286,000 acres. A larger area has been sold than in any year since the outbreak of the war. The area mortgaged during the year, though rather larger than in the previous year, does not reach the average of the year preceding that. The rise in redemptions may be regarded as sympathetic to the increases under the other two heads : redemptions are not usually reported unless the land

redeemed is to be sold or mortgaged elsewhere. The statistics for Myaungmya and Pegu, which exhibit conspicuous advances under all three heads, lend colour to this view.

The area transferred by sale was 3·4 *per cent.* of the total area covered by the statistics: the area mortgaged without possession was 2·5 *per cent.*, and the area redeemed 1·6 *per cent.*, the corresponding figures for last year were 2·7, 2·6 and 1·4 respectively. The land held under mortgage at the end of the year was 16·2 *per cent.* of the whole, as against 16·1. In Lower Burma the areas sold and mortgaged formed respectively 5·4 and 4·6 *per cent.* of the whole area: the figures for Upper Burma are ·86 and ·1 *per cent.*

The total value of the land sold rose from Rs. 2,87·02 *lakhs* to Rs. 3,70 *lakhs*, the value of mortgaged land from Rs. 1,89·22 *lakhs* to Rs. 2,02·25 *lakhs*. The average value of the land sold rose from 60 to 63 rupees an acre, and of land mortgaged from 42 to 45 rupees. In Lower Burma mortgage values tend to approximate to two-thirds of sale values: in Upper Burma the figures suggest that land fetches more on mortgage than when sold outright, though the averages are possibly misleading owing to the smallness of the areas involved.

Transfers by sale exceeded 75,000 acres in the Pegu District, and lay between 40 and 50 thousand acres in Hanthawaddy, Tharrawaddy, Bassein, Myaungmya and Pyapôn. Transfers by mortgage exceeded 50 thousand acres in Tharrawaddy, Pegu, Myaungmya and Pyapôn. In Upper Burma sales exceeding 10,000 acres were reported from Yamèthin and Kyauksè, while for Shwebo and Mandalay the figure exceeds 9,000 acres in each case; these districts, as was pointed out in the last Report on the Administration of Burma are among those Upper Burma districts in which land is most valuable. Yamèthin, Kyauksè and Mandalay head the list of areas mortgaged, the figure ranging between 2,000 and 2,400 acres. With regard to these mortgage statistics it must be remembered that the customary method of alienation is usufructuary. But the mortgagor not infrequently continues in occupation as tenant of the mortgagee, paying interest under the name of rent. In Lower Burma the mortgagor would transfer his land by a non-usufructuary mortgage, and pay interest. The practical result of both transactions is identical, but whereas the latter would find a place in the statistics, the former would not. It is, therefore, clearly impossible to compare to any advantage the mortgage statistics relating to the two divisions of the Province In the case too, of transfers generally it should be noted that the existant figures are based on the record of transfers reported to the Registration Department, and are almost certainly incomplete. The object of recording transfers is three-fold, administrative, fiscal and legal, but under the existing procedure the two former objects are subordinated to the last and the accuracy of figures bearing intimately on the welfare of the province depends on the

zeal which private individuals may evince for a clear legal title to their land. But such causes are in constant operation and do not vitiate the comparison of one year's statistics with another. The figures suggest that the province has made a sensible step towards the recovery of normal conditions, so long interrupted by the war.

Waste Lands.

Grants and leases for cultivation.

23. The area granted or leased for cultivation decreased by 1,000 acres to 15,469. Most of the grants or leases were given in Mergui, Thatôn, Insein, Toungoo and Amherst. In the vast majority of cases the contemplated crop was rubber, though palm and lemon-grass cultivation were also represented.

Revenue-free grants of land and assignments of land revenue.

24. The area granted free of revenue for religious purposes increased to 121 acres, and that granted for public purposes, such as burial-grounds, to 40 acres. The area of land allotted as an appanage of the office of headman decreased by 111 acres to 326. The total amount of assignments of land revenue increased by Rs 661, of which Rs. 132 represents an increase under assignments for the maintenance of public servants.

Two of the waste land grants under the old rules were acquired during the year, one by the Kyaukpyu Municipality and the other, partially, by the Rangoon Port Commissioners.

Government Estates and Wards' Estates.

25. The character of the land tenures in Burma is explained in paragraph 39 *et seq.* of the *Report on the Administration of Burma* for the year 1911-12. Apart from Government lands of the kind therein described, there are no Government estates in the special sense of particular cultivated areas managed by Government after the fashion of a private landlord. There are no wards' estates.

Revenue and Rent-paying Classes.

Area held by agriculturists.

26. Of the total occupied area for which statistics are recorded 14,640,784 acres were occupied by agriculturists, and 3,010,859 acres by non-agriculturists. The increase over last year's figure is 24,525 acres in the case of the former, and 126,666 acres in the case of the latter. During the last three years the percentage of the whole area held by agriculturists has declined from 84·2, through 83·5 to 82·8 and it is noteworthy that of the total increase reported for the year 1919-20 under the head of non-agriculturists 58,818 acres went to residents, and 67,848 to non-residents.

In Lower Burma agriculturists occupied 75·1 *per cent.* of the occupied area as against 75·8 *per cent.* in the year before. Non-agriculturists held as much as 44 *per cent.* of the land in Hanthawaddy, while the figure exceeds 30 *per cent.* in Insein, Pegu, Ma-ubin, Pyapôn and Toungoo. Of the total land held by non-agriculturists three-quarters is held by persons who are non-resident as well. In Hanthawaddy non-residents held 37 *per cent.* of the total occupied area, and over 20 *per cent.* in Insein, Pegu, Pyapôn, Toungoo and Tavoy.

In Upper Burma, agriculturists occupied 7,394,536 acres, or 92·4 *per cent.* of the occupied area, and non-agriculturists 607,205 acres, or 7·6 *per cent.* The percentage of land held by non-agriculturists is highest in the remote Upper Chindwin District (27 *per cent.*) and exceeds 10 *per cent.* in Lower Chindwin (17 *per cent.*), Minbu (16 *per cent.*) and Yamèthin (12 *per cent.*). In Mandalay and Myingyan the proportion held by non-agriculturists touches 10 *per cent.*

Tenancies.

27. The area let at full rents increased by more than 30,000 acres to 3½ million acres, nearly the whole rented area lying in Lower Burma. But the figures exclude lands rented at a share of the produce, which is the ordinary form of lease in Upper Burma, and thus convey a very misleading picture of conditions there. Also in some districts tenancies have erroneously been excluded from these statistics because the rent was reduced for failure of crops; thus there are large reductions, both as regards the number of tenants and areas rented in Prome, Tharrawaddy and Henzada. Insein and Pegu report increases of over 50,000 acres in the rented area; Ma-ubin, Hanthawaddy and Toungoo increases of over 20,000. In Pegu and Hanthawaddy over half the occupied area is rented; in Pyapôn, Myaungmya and Insein over 40 *per cent.* No instances of oppression or rack-renting by landlords are recorded. The proportion of tenants who had rented their lands for five years or more remained constant at 14 *per cent.*

The total amount of rent paid increased by some 2¼ *lakhs* to Rs. 7,15,34,179. This was due in the main to the rise in prices, and the consequently enhanced commutation value of rents paid in kind. In Hanthawaddy rents increased from Rs. 74·57 *lakhs* to Rs. 1,13·09 *lakhs*, in Pegu from Rs. 69·70 *lakhs* to Rs. 1,03·65 *lakhs*, in Myaungmya from Rs. 59·12 *lakhs* to Rs. 81·34 *lakhs*, and in Pyapôn from Rs. 50·16 *lakhs* to Rs. 74·24 *lakhs*.

CHAPTER III.

PROTECTION.

REFERENCES—

Report on the Police Administration of Burma for the year 1919.
Report on the Rangoon Town Police for the year 1919.
Resolution on the Reports on Village Administration in Burma for the year 1919.
Returns showing the measures adopted for the extermination of Wild Animals and Poisonous Snakes in Burma for the year 1919.
Reports on the Administration of Criminal Justice in Burma for the year 1919.
Report on the Prison Administration of Burma for the year 1919.
Reports on the Administration of Civil Justice in Burma for the year 1919.
Note on the Working of the Registration Department in Burma for the year 1919.
Report on the Working of the Indian Companies Act in Burma for the year 1919-20.
Report on the Working of the Rangoon Municipality for the year 1919-20.
Resolution reviewing the Reports on the Working of Municipal Committees in Burma (except Rangoon) during the year 1919-20.
Administration Report of the Public Works Department, Burma, Buildings and Roads Branch, for the year 1919-20.
Administration Report of the Commissioners for the Port of Rangoon for the year 1919-20.
Annual Statement of the Sea-borne Trade and Navigation of Burma with Foreign Countries and Indian Ports for the official year 1919-20, Part III, Shipping.
Report on the Maritime Trade and Customs Administration of Burma for the official year 1919-20.
Annual Statement of the Sea-borne Trade and Navigation of British India with the British Empire and Foreign Countries, Volume II.
Annual Statement of Coasting Trade and Navigation of British India.
Statistical Abstract for British India, Volumes I, III and IV.
Report on Government Steamers, Vessels and Launches in Burma for the year 1919-20.

Legislative Authority.

The history and constitution of the Legislative Authority of the Province are described in paragraphs 103 to 106 inclusive of the *Report on the Administration of Burma* for the year 1911-12.

Course of Legislation.

Work of Legislative Council.

28. If the report were confined to a mere record of the legislative measures which actually became law and came into force within the financial year 1919-20, the record would appear to be singularly uninteresting and barren of practical results, for the only measure which became law and came into force during that year was the

Burma Excise (Amendment) Act (I of 1920), an Act consisting of one amending section by which the tree-foot sale of *tari* was forbidden except by persons holding a permit for the purpose under the Excise Act. If, however, the report is brought up to date, the period covered by it would disclose an amount of legislative activity unprecedented in the history of this province. The legislation undertaken, and carried through the Burma Legislative Council, though much of it has not yet come into operation, covers a variety of subjects vitally affecting the development and growth of the province in general and of the City of Rangoon in particular.

Of the two Bills referred to in last year's report, *viz.*, the Burma Towns Amendment Bill, 1919, and the Rangoon Development Trust Bill, 1919, the former has already become law (Act III of 1920), while the latter, though it has received the assent of the Governor-General, has not come into operation, as no notification bringing it into force has yet been issued by the Local Government. It is hoped that it will come fully into operation about the beginning of next year when all the necessary arrangements for the constitution and equipment of the Development Trust are completed. Closely allied to the Development Trust Act is the City of Rangoon Municipal Bill, 1919, which was introduced in the Burma Legislative Council, and referred to a Select Committee on the 2nd January 1920. The object of the Bill is to make special legislative provision for the Municipal Government of the City of Rangoon as distinct from the rest of the province. It is substantially based on the City of Bombay Municipal Act, 1888, and seeks to introduce in Rangoon what is commonly known as the Bombay System of Municipal Government, with a Corporation whose President is elected, a Standing Committee, and a Commissioner. The Select Committee have not yet been able to complete their deliberations over the Bill, owing to its length and complexity, but it is hoped that before the next report comes to be written, the Bill will have become law.

The Rangoon Rent Act (II of 1920) was an important measure enacted for the protection of tenants against landlords. It is based on the two Bombay Rent Acts of 1918. It has already given much needed relief to tenants without, according to certain figures recently published by the Rangoon Municipal Committee, adversely affecting building operations in the City.

The Rangoon Municipal Sewage Act (IV of 1920) was passed as an urgent measure, in consequence of the judgment of the Chief Court of Lower Burma, in the case of the Burma Railways Co. and two *vs.* the Rangoon Municipal Committee. In brief, it enables the Rangoon Municipal Committee to commit a Statutory nuisance, but reserves to the Court the decision of the question whether it has exceeded its Statutory powers. The provisions of the Act are intended to be incorporated in the City of Rangoon Municipal Act, and with their incorporation the Act will be repealed.

The Burma Financial Commissioner's (Amendment) Act (VI of 1920) was enacted for the purpose of creating the post of an Additional Financial Commissioner, and of thereby affording relief to the Financial Commissioner.

The Rangoon University Bill, 1920, was passed by the Burma Legislative Council, at its meeting on the 28th August. It establishes a teaching and residential University at Rangoon and makes the beginning of a new era in the higher education of the population of Burma. The Rangoon Small Cause Court Bill, which has also been passed by the Burma Legislative Council, re-constitutes the Rangoon Small Cause Court on the lines of the Presidency Small Cause Courts. Its procedure, however, will remain more or less the same as it was under the Provincial Small Cause Courts Act, 1887, by which it was formerly governed, and the right of appeal to the Chief Court in cases exceeding Rs. 1,000 in value has been also expressly preserved. The Burma Registration of Business Names Bill was another of the important Bills passed by the Burma Legislative Council along with the other two Bills. It is intended to prevent the traders of those nations which have been at war with the Empire from trading in the province under assumed names, and to protect the business community against bogus and fraudulent partnerships. Hindus subject to the Hindu joint family law have been expressly excluded from its operation.

General Acts affecting Burma.

29. The undermentioned General Acts affecting Burma were passed by the Governor-General in Council during the year :—

General Acts of 1919.

XII.—The Poisons Act, 1919.
XIII.—The Sea Customs (Amendment) Act, 1919.
XIV.—The Provident Funds (Amendment) Act, 1919.
XVI.—The Indian Naturalization (Amendment) Act, 1919.
XVII.—The Land Acquisition (Amendment) Act, 1919.
XVIII.—The Repealing and Amending Act, 1919.
XIX.—The Indian Tariff (Amendment) Act, 1919.
XX.—The Indian Arms (Amendment) Act, 1919.
XXI.—The Indian Coinage (Amendment) Act, 1919.
XXII.—The Cantonments (Amendment) Act, 1919.
XXIII.—The Cinematograph (Amendment) Act, 1919.
XXIV.—The Indian Companies Restriction Repealing Act, 1919.
XXV.—The Indian Merchant Shipping Law Amendment Act, 1919.
XXVI.—The Indian Paper Currency (Further Amendment) Act, 1919.

GENERAL ACTS OF 1920.

I.—The Indian Steam-ships (Amendment) Act, 1920.
II.—The Indian Army (Amendment) Act, 1920.
IV.—The Indian Census Act, 1920.
V.—The Provincial Insolvency Act, 1920.
VI.—The Indian Steam-vessels (Amendment) Act, 1920.
VII.—The Indian Tariff (Amendment) Act, 1920.
VIII.—The Dourine (Amendment) Act, 1920.
IX.—The Glanders and Farcy (Amendment) Act, 1920.
X —The Indian Securities Act, 1920.
XI —The Presidency-Towns Insolvency (Amendment) Act, 1920.
XII.—The Workman's Breach of Contract (Amendment) Act, 1920.
XIII.—The Import and Export of Goods (Amendment) Act, 1920.
XIV.—The Charitable and Religious Trusts Act, 1920.
XV.—The Indian Red Cross Society Act, 1920.
XVII.—The Indian Income-tax (Amendment) Act, 1920.
XIX.—The Super-tax Act, 1920.
XX.—The Indian Army (Suspension of Sentences) Act, 1920.
XXI.—The Indian Paper Currency (Temporary Amendment) Act, 1920.

ORDINANCES OF THE GOVERNOR-GENERAL.

The undermentioned Ordinances affecting Burma were made and promulgated by the Governor-General under section 72 of the Government of India Act, 1915:—

Ordinance of 1919.

VII.—The Rouble Note Ordinance, 1919.

Ordinance of 1920.

I.—The Treaty of Peace Ordinance, 1920.

The following Ordinance affecting Burma was made and promulgated by the Governor-General since the close of the year of report:—

Ordinance of 1920.

II.—The Rouble Note Ordinance, 1920.

All these Acts and Ordinances came fully into force during the year under report, with the exception of the Rouble Note Ordinance, 1920, and three Acts, *viz.*, the Indian Securities Act, 1920, the Indian Income-tax (Amendment) Act, 1920, and the Super-tax Act, 1920, which three Acts did not come into force until the 1st April, *i.e.*, just after the close of the year of report. The Indian Paper Currency (Temporary Amendment) Act, 1920, is to remain in force up to the 1st October 1920.

Regulations affecting Burma.

30. No Regulations affecting Burma were enacted during the year.

Extension of Enactments to Shan States.

31. The Indian Non-ferrous Metal Industry Act, 1918, the Indian Patents and Designs Act, 1911, and the Rules under the Act, were extended to all the Shan States. The Indian Arms Act, 1878, was extended to the States of Hkamti Long in the Putao District; and the Indian Mines Act, 1901, and the Rules thereunder, were extended to the Northern Shan States during the year under report.

The Super-tax Act, 1920, has been extended to all the Shan States since the close of the year of report.

Police.

Civil Police: strength, recruitment and cost.

32. The sanctioned strength of the force, excluding gazetted officers, was 1,474 officers and 13,725 men. The actual strength at the end of the year was 1,390 officers and 12,618 men, the shortages being slightly higher than in the previous year. The shortage of officers was principally due to the fact that once more the sanctioned number of vacancies in the Police Training School was not filled up, only 44 Cadet Sub-Inspectors being appointed instead of 90. In the Mandalay District, in spite of the recent enhancement of a constable's pay to Rs. 17, the shortage in strength amounted to 143, while Amherst, Thatôn, Pegu, Prome and Tharrawaddy all reported a shortage in excess of 50. The poorness of the pay and the inadequacy of the accommodation provided account for the difficulty in obtaining recruits of the right stamp, or indeed of any stamp at all. Proposals were submitted to the Government of India for a substantial improvement in the pay and conditions of service of the police-force, and the knowledge of this may have helped to swell the number of enlistments, though it has evidently failed to diminish that of desertions and resignations. A few gazetted officers were still on deputation with the Army or the Military Police throughout the year.

The total cost of the force payable from Imperial and Provincial Revenues was Rs. 69·60 *lakhs*, involving an increase of Rs. 5·11 *lakhs* over the expenditure of the previous year. The increase is attributed to a revision in the scale of pay for Imperial Police Officers, to the greater liberality of the new travelling allowance rules, and to the fact that more travelling was performed owing to the increase in crime.

The decline in the cost of police paid for from other than Imperial and Provincial Revenues was due to the fact that from April 1st, 1919,

the Burma Railways ceased to contribute towards the cost of the police for crime and order on the railway, which cost is now met by Government. The figures are respectively Rs. 2·49 *lakhs* and Rs 1·74 *lakhs*. Owing to the abolition of the punitive ploice-force in the Toungoo District, and to the greater economy exercised in contingent expenditure, the cost of punitive police declined from nearly Rs. 2 *lakhs* to Rs. 1½ *lakhs*.

Conduct, education and training.

33. Departmental dismissals or removals of officers and men exactly reproduce the figures of 1918, namely, 10 and 207 respectively. Ten officers and 331 men were punished magisterially, of whom three officers and 266 men were dismissed as the result of conviction. The total number of officers and men dismissed was thus 16 and 479, as compared with 10 and 419 in 1918. Other departmental punishments were awarded to 309 officers and 1,496 men, involving a respective increase of 35 and 125 in the number of punishments inflicted. The percentage of punishments to the actual strength of officers and men rose from 20 and 14 to 23 and 16. Once more the conduct of officers who had passed out of the Police Training School was better, on the statistics, than that of officers promoted from the ranks.

Special promotions for good work were 31, or exactly half the number recorded in the previous year. The number of other rewards decreased by 126 to 3,414, of which 1,783 were granted departmentally, and 1,631 were awarded by the Courts in Excise and other cases. The percentage of all rewards to the actual strength was 24.

Six cases of extortion, five of violence to the person, two of wrongful confinement, one of ill-treatment of an accused, and eight of other improper conduct were proved against police officers. Appropriate punishments were awarded in all these cases, none of which were particularly serious. The King's Police Medal was awarded to two officers during the year.

There were no Probationary Assistant or Deputy Superintendents under training during the year, though one officer of the latter class was posted to the Training School for a short time to refresh his memory on Burmese and police law after a four years' absence with the Army. No Cadet Inspectors were appointed, as under the new system Cadet Sub-Inspectors who have proved themselves the best men of their year are appointed Inspectors at the end of the course and drafted out to districts. Forty-four Cadet Sub-Inspectors were appointed, and six Sub-Inspectors of Excise were posted to the school for training. Five Cadets resigned, one was discharged for ill-health, and one removed for misconduct. Thirty-eight cadets appeared for the final examination and all passed, the three best, who were Anglo-Indians by race, were appointed Inspectors. The conduct of Cadets was again very good, and their

general health much better than last year. The number of literate subordinate officers and men was 12,408, the percentage to total strength being 89, as against 88 in 1918. The number of constables other than recruits trained during the year was 1,784, and 93 *per cent.* qualified: the percentage is the same as in the previous year. The number of recruits trained was 2,174, of whom 1,183 qualified. The number of officers who underwent the annual revolver course increased from 1,230 to 1,239, and the figure of merit improved from 45 to 52. The number of trained constables who fired the annual course of musketry fell from 10,019 to 9,791, while that of recruits rose from 1,427 to 1,594. The average figure of merit obtained remained stationary at 62. Classes of instruction in First Aid to the Injured were held in all but four districts. The number of officers and men who gained the badge of the St. John Ambulance Association was 716, nearly double the figure for the preceding year. The Yamèthin District, with its 163 passes among 172 candidates did particularly well.

The Police Co-operative Societies at Prome and Pegu continued to improve, and the coffee-shop at Magwe was popular. New coffee-shops were opened at Papun and Pakôkku, and did excellent work. The annual departmental football competition was again held at Mandalay, and a police team entered for the Walter Locke Competition.

Buildings.

34. The amount allotted in the police budget for petty construction and repairs during the year 1919-20 was again Rs. 75,000, and was spent in executing repairs to existing quarters, improving them and constructing temporary cottages to meet urgent requirements. Of the total sum of Rs. 4·67 *lakhs* provided in the Public Works Department Budget for the Civil Police, a sum of Rs. 3 *lakhs* represents the allotment for police cottages. Considerable progress was made with the important work of providing decent accommodation for the members of the force; eleven sets of quarters were completed at various places, and funds have been allotted for the construction of ten further sets.

Crime.

35. The total number of true cognizable cases reported was 52,172, or very nearly 8,000 more than the figure for the previous year. This extraordinary increase was spread over every class of crime, and shared by every division in the province. Ordinary theft contributed most largely to the general rise by something like 3,000 cases: another considerable increase, of 434 cases, occurred under the head of cattle theft. Offences against public law and order rose by 75, serious offences against the person by 691, serious offences against property by

1,509, minor offences against the person by 71, and cases of miscellaneous cognisable crime by 1,150. An important contributor to the last-named has been the offence of gambling.

Working of the Police.

36. Excluding cases in which investigation was refused, the police had to deal with 70,460 cases, as compared with 61,903, in 1918: the increase amounts to 8,557. If the class of miscellaneous crime be excluded, the total number of true cases, remaining was 32,674, against 26,878. Convictions declined from 54 to 50 *per cent.* of this figure. Of the cases actually sent up for trial 83 *per cent.* were convicted as against 84 *per cent.* in the preceding year. Myaungmya and Ma-ubin again show the best results, and Tavoy the worst.

The number of persons dealt with under all classes of offences was 62,647, an increase of 5,650 from the figure of 1918. The percentage of convictions to the number of persons dealt with, and to the number sent up for trial is in each case less by 1 than in the previous year. As regards crime proper, that is to say, with the exclusion of the miscellaneous class, 36,951 persons were tried, of whom 57 *per cent.* were convicted, as against 56 *per cent.* in 1918. The percentage of cases in which investigation was refused remained the same as in the previous year.

The number of cases of violent crime increased from 1,456 to 1,721: these figures include cases dealt with direct by Magistrates. Of the total increase of 265 cases, Lower Burma is responsible for no less than 258, Tavoy, Thatôn, Henzada, Insein, Tharrawaddy and Pegu being the largest contributors. In Upper Burma, Pakôkku and Magwe were the districts that showed the greatest increase. Cases of murder, in its various forms, rose by nearly a hundred to 583, of dacoity by 45 to 234, and of robbery by nearly a hundred and fifty to 653. Attempts at murder and house-breaking alone showed a slight decrease. The number of true cases of violent crime dealt with by the police was 1,711, of which 1,033 were tried, with the result that 639 convictions were obtained. The percentage of convictions to cases dealt with and to cases tried was respectively 37 and 62, these results being slightly worse than in 1918. Five hundred and eighty-one true cases of murder were dealt with by the police, and the percentage of convictions to cases dealt with again shows a decline, the figure now standing at 23 as against 28. It is the premeditated murder which chiefly avoids detection, and the above statistics perhaps suggest that this type is on the increase. There has been an improvement in the working of the police so far as regards dacoity and allied offences. Of 232 cases dealt with 84, or 36 *per cent.*, ended in conviction, the increase being 7 *per cent.* Organized gangs from Gyobintha, Bwèbingan and Thitseinbin in the Paundgè Subdivision were between them responsible for 21 dacoities.

The necessary preventive action has been taken against them. Tavoy suffered from four outlaws and their respective followers: one escaped, but the rest have been dealt with. The peace of this, and the neighbouring Amherst District, was also disturbed by marauders from Siam. A gang of 16 men operating in the Ma-ubin District was eventually brought to book through the confession of two of the members. Of a notorious gang in the Pegu District under Nga Pyan and Nga Di Bo four were killed, and the remaining eight men arrested. The policy of arming selected headmen with guns has again proved a success; in no case was the village of such a headman attacked by dacoits. The increase in robberies was general throughout the province, being most conspicuous in Tharrawaddy, Hanthawaddy and Tavoy. Detection was not very satisfactory, the percentage of convictions to cases dealt with declining to 40. Nor were the force more successful with regard to the more serious forms of house-breaking: the 94 cases dealt with resulted in only 26 convictions. Ordinary burglaries increased by 1,000 to 4,591, Thatôn, Bassein, Pegu and Tharrawaddy presenting the worst record. The working results were practically the same as last year, but in Tavoy, Yamêthin, Shwebo and Meiktila they were very poor. There was a marked improvement in the percentage of stolen property recovered, the figure rising from 11 to 29. This result is mainly due to admirable work performed in three cases by Deputy Superintendent Maung Ba Kyin of Mandalay. Cases of cattle theft rose from 2,403 to 2,837, but it is gratifying to note that the percentage of convictions to cases dealt with advanced from 46 to 52. Pegu, Pakôkku and Myingyan are the districts recording the largest increases. Cases of ordinary theft were 14,624 as against 11,669 in 1918, the chief contributors to the rise being Pegu, Bassein and Tharrawaddy. The ratio of convictions to cases dealt with declined from 49 to 48 *per cent.*, but the most successful district, Ma-ubin, attained the excellent standard of 68.

Important incidents.

37. The crime which probably attracted most attention during the year was the assault delivered by a band of Buddhist monks, armed with *dahs* and iron rods, upon a small party of Europeans who were visiting the Eindawya Pagoda, Mandalay, during the annual festival in October. The ostensible ground for the attack was the fact that the Europeans had entered the pagoda precincts without removing their shoes, which they had never been requested to do. One of the party, a young Assistant District Superintendent of Police, who was present in a private capacity, sustained a permanent and serious disfigurement of the face. The case appeared to be singularly unpromising with a view to detection, as the place was not well lighted, and several hundreds of monks were present on the pagoda platform. It was, however,

worked up with great skill by Deputy Superintendent, Maung Ba Kyin, and four monks were sentenced by the Court of Sessions to long terms of imprisonment. Other noteworthy cases are mentioned below. Such interest as they possess is confined to the brutality of the crime, or the inadequacy of the motive underlying it. It must regretfully be admitted that they are entirely typical of the disregard for human life which obtains in this country.

In the Pegu District the Sub-Registrar of Daiku was murdered while sitting in his house. The motive of this murder was revenge due to the Sub-Registrar not having given promotion to one of his clerks. The latter hired certain bad characters to beat him and the first blow delivered with a weighted stick caused his death. This case was undetected although a reward of Rs. 1,000 was offered by the leading men of Daiku and Government combined. In the Mergui District four men visited a house on the pretence of hiring some buffaloes. Once there they waited their opportunity, seized the house-owner and bound him and all the inmates of the house. Money was then demanded and when this was refused, the house-owner, his wife, his sister-in-law and child, aged two years, were all killed. One accused confessed and was convicted; the remaining three were acquitted. In Katha, a girl, aged 8, and her brother, aged 6, were murdered while herding buffaloes on the grazing ground. No motive for this murder could be discovered. In Ma-ubin a boy, when remonstrated with on account of his extravagance, struck his father on the head with an iron bar and killed him. This murder was originally concealed and the deceased buried, the cause of death being shown as fever. Later, the body was exhumed and the true facts came to light, but the accused was not convicted. In the Minbu District the headman of Chitpaik village was assaulted by a monk, who cut him several times on the head and neck with a sword. He died from the effects of the wounds. In this case the motive is said to be revenge and irritation at the efforts which the headman was making to further recruitment for the Army. The accused had not been arrested by the close of the year. In a second case the headman of Monmagôn village while inspecting the village fence had words with a villager about the portion of fence which had been allotted to him. A quarrel ensued which resulted in the villager cutting the headman with a *dah*. Death resulted and the accused has since been convicted. In a third case the headman of the Lègaing village was murdered by the watchmen while he was on his rounds inspecting them. Six men were arrested and were pending trial at the end of the year. In Henzada, the headman of Nandakyin village was shot from underneath the house in which he was sitting talking with some friends of his. The motive of this murder was a dispute about land and the case remained undetected.

A case of brutal murder was reported from the Myaungmya District. A father and his son aged 16 were returning home by boat from

Kadonkani with about Rs. 500 in their possession. They were not heard of again and it was some time before this case came to light. Two men were arrested and each accused the other of having committed the crime, the details of which are as follows :—These two men in their boat joined the father and son when on the main river and the two boats were lashed together for the sake of security. When the boats were on the broadest part of the river they waited their opportunity and cut down the father. The son jumped overboard but was unable to reach the shore and after swimming about for some time he begged that his life might be spared. This was promised him, but when he approached the boats again he too was killed. The boat was then cut adrift and this and the dead bodies were not seen again being most probably washed out to sea. Such is the tale told by the two suspects themselves. Only a small amount of corroborative evidence could be obtained, and as each suspect denied that he himself had taken part in the murder, putting the whole of the blame on his companion, their statements did not amount to confessions and could not be used as evidence. The case therefore was undetected, although the tale as told by the murderers was undoubtedly correct. It is in cases like this where no reasonable person can have any doubt about the guilt of the suspected parties, but where owing to the strictness of our legal procedure convictions cannot be obtained, that the relatives and friends of the murdered men, and the neighbours generally, must view with doubt the efficacy of our criminal administration.

Offences under Special Acts.

38. There was a decrease in the number of true cases dealt with under the Excise Act, from 7,289 to 5,993. Of the total cases the Police were responsible for 2,900, or 231 less than last year, and the Excise Department for 3,093, or 1,065 less. Of the 5,961 cases tried, 92 *per cent.* ended in conviction. The largest decreases occurred in the districts of Prome, Henzada and Pegu. In Prome one important seizure of 4,800 grains of cocaine was made, but its ownership could not be traced. The present difficulty of obtaining supplies appears to have discouraged the use of the drug. Two large seizures of *ganja* were made by the Meiktila Excise Staff, 20,860 tolas being discovered in the jungle near Hanza, and 26,018 tolas, consigned to Hanza, being caught at Phayre Street Station, Rangoon. It was impossible to trace ownership in the former case, and in the latter, though three persons were convicted, their sentences were quashed on appeal. A large seizure of country liquor was reported from each of the districts of Bassein and Mandalay; both were made by the Excise Department. The closing of certain liquor shops in the Kyônpyaw Subdivision of Bassein resulted last year in a reduction of the volume of serious crime, but this phenomenon has not been sustained, and it is probably

too early to arrive at a definite conclusion as to the effect on crime of the closing of these shops. Both 1918 and 1919 were exceptional years.

There was an increase of 260 cases under the Opium Act during the year, 2,016 cases being dealt with as against 1,756 in 1918; 1,993 cases were brought to trial and 1,925 convictions were obtained. The largest seizure—1,280 tolas—was made by the Excise Department in Bassein. The number of successful prosecutions under section 3 of the Burma Opium Law Amendment Act declined from 209 to 178. Offences under the Gambling Act showed an increase, true cases rising from 3,900 to 4,696. The percentage of convictions remained constant at 78. The number of proceedings taken under section 17 of the Act against professional gamblers increased from 110 to 142, and 114 persons were bound over as against 77 in the previous year. Several murders and one case of embezzlement were directly attributable to gambling.

The number of cases dealt with under the Arms Act rose from 644 to 824, and the percentage of persons convicted improved from 78 to 83. Ninety-seven firearms came into the possession of the Police, but of these only two were surrendered, against 13 in the year before. The Kawkareik Subdivision is reported to be full of unlicensed guns imported from Siam. Three hundred and sixty detonators, of which over 200 were afterwards recovered, were stolen from the Pauk Inspection Bungalow. The motive was apparently to bring trouble upon a contractor, on whose premises a large number were found to have been "planted." The number of licensed firearms decreased by 288 to 2,267.

Non-cognisable crime.

39. The number of true cases of non-cognisable crime rose by 3,368 to 40,220, which is very near the figure for 1917. The chief increase—1,876—occurred under special and local laws; cases of simple hurt increased by 772. The majority of districts contributed to the general rise, Mandalay, Magwe and Thatôn being most conspicuous in this respect. The chief decreases occurred in Pegu, Henzada and Tavoy. The percentage of convictions in the true cases dealt with fell from 71 to 69. Prosecutions for perjury were once more lamentably few in comparison with the cases declared to be false.

Preventive sections, surveillance and identification.

40. The number of proceedings instituted under the preventive sections declined from 1,486 to 1,469, but the percentage of successful cases regained the 1917 level of 85. The results obtained in individual districts exhibit considerable fluctuations. The most marked improve ments were shown by Tavoy, which raised its percentage of convictions from 9 to 78, and

Magwe, whose figures improved from 50 to 97. New orders concerning the preparation of bad livelihood cases were issued during the year by the Local Government.

The number of men on the surveillance registers fell from 7,826 at the beginning of 1919 to 7,005 at the close of the year. Conditionally released prisoners declined from 330 to 219. Of the total of 7,005 men, 1,405 were in jail, 5,045 were under surveillance and 555 were evading observation. In Pegu it was discovered that the registers had been so long neglected that statistics compiled from them were quite valueless: the lists were thoroughly revised and brought up to date by the new District Superintendent. The number of ticket-of-leave convicts in the Tavoy District at the beginning of 1919 was 629; 161 were sent down during the course of the year. Of these 790 men, 320 were sent home for release, 37 remained in the district on the expiry of their term of conditional release, 68 were remanded to jail, 13 absconded and 5 were reconvicted.

The number of absconders advertised during the year decreased slightly from 1,665 to 1,624, and the number arrested from 1,306 to 1,242. The number of persons whose names were cancelled on account of death or other causes increased from 650 to 676. The balance of absconders at large at the end of the year was 4,152. Tharrawaddy, Pegu and Henzada show the largest outstandings, but the lists are probably in need of revision, with a view to expunging the names of all except those men against whom really adequate evidence is forthcoming. Hanthawaddy, Bassein and Henzada show the best record of arrests.

The total number of prisoners with previous convictions who were identified by the police before conviction rose from 4,511 to 5,642. Nearly one thousand of the latter number had four or more previous convictions. The number of finger-print slips received increased from 15,993 to 16,123. The number withdrawn was 6,038 as against 6,228. Rejections showed a further decline, from 1,590 to 1,358. The grand total of slips on record rose by ten thousand to 191,365. Two hundred and forty-six subordinate officers and men were trained in finger-print work, an increase of 50 *per cent.* over last year's figures. The number of search slips received was 9,963, or 2,021 more than in the previous year. Previous convictions were traced in 2,290 cases, or 23 *per cent.* as against 25 *per cent.* in 1918. The Auxiliary Finger-Print Bureau at Yenangyaung continued to make up leeway in the classification of labourers on the oil-fields, but the staff needs strengthening. Expert evidence was given in 234 cases, of which 163 were Criminal and 71 Civil. Expert opinion was given in writing in 452 cases, of which 389 had to do with finger-prints on pawn tickets. These figures denote an expansion of the work of this branch of the Police.

The Criminal Investigation Department showed a considerable increase of activity with regard to the preparation of cases under the

Criminal Tribes Act. Forty-one cases were investigated, in 8 of which convictions were obtained. The most important of these cases were in connexion with the Public Works Department Stores in Rangoon, and the smuggling of gold into Moulmein. One hundred and eighty-eight forged currency notes were seized by the police in 1919, as against 88 in the year before.

Punitive Police.

41. The sanctioned strength of the additional police-forces in the Hanthawaddy and Pegu Districts remained unchanged at 391. The force of 14 men in the Toungoo District was disbanded in October 1919.

Railway Police.

42. The strength of the Railway Police remained the same as at the close of 1918, but the reduction effected during that year resulted in a very considerable falling off in detection. The cost of the force remained stationary. Conduct was fairly satisfactory; 3 men were dismissed after conviction in the Courts, and 7 were removed. None, however, were dismissed after departmental enquiry. There was a slight increase in the number of departmental punishments. Rewards were not granted as freely as in the previous year, and it is possible that greater liberality in this direction might have been shown with advantage.

The number of true cases finally dealt with increased from 1,653 to 2,278, and the number of persons concerned from 1,875 to 2,242. The percentage of persons convicted fell from 79 to 78. Thefts from waggons and running trains increased considerably. The latter is the more serious form of crime, but the introduction of a special patrol system in September 1919 caused an appreciable improvement before the end of the year. There was a welcome decrease from 15 to 8 in the number of cases of attempted derailment; of the four cases brought to trial three ended in conviction, and none were of a serious nature. The number of cases dealt with under the Excise and Opium Acts declined from 102 to 77, with 72 convictions. Of 19 cases dealt with under the Arms Act, 18 resulted in conviction. One muzzle-loading gun, one automatic pistol and one revolver were seized. Cases of violent crime decreased from 11 to 6. Of these, one robbery case was unsuccessfully sent up for trial. The remaining five were murders: two ended in acquittal or discharge, and three remained undetected. The number of criminals remaining on the surveillance registers declined from 334 to 274. The number of absconders at large decreased from 55 to 53: 134 old offenders, of whom 29 had four or more previous convictions, were identified through their finger-prints. Two Inspectors, 7 Sub-Inspectors and 6 Head Constables were trained in elementary finger-print work.

Military Police.

43. At the end of 1919, the actual strength of the Military Police force was 413 below the sanctioned strength, which was increased from 16,409 to 16,470 during the year by the inclusion of 61 Gun Kahars of the Chin Hills Battalion in the ranks. At the close of the Kuki operations of 1918-19 permanent posts at Fort Keary, Paisat and Layshi with a strength of 75 each, and a reserve at Maungkan of 227 were established in the Somra Tract, and included in the Chindwin Battalion. The Thazi post of the Meiktila District, which had been handed over to the Civil Police in 1918, was re-established. Outposts at Molo and Shwelaung were abolished, and the post at Myittha, in the Tavoy District, was withdrawn. The Kapi post of the Chin Hills Battalion was transferred to Lotaw, and its strength increased to 150.

The operations against the Kukis described in last year's report were brought to a successful conclusion. The rebel chiefs were killed or captured and the Somra Tract disarmed. The Kuki Punitive Measures Force was demobilised on May 31st, 1919. The General Officer Commanding, Kohima, expressed to the General Officer Commanding the Burma Division "his high appreciation of the cheerful and soldier-like spirit in which all ranks had borne the hardships incidental to operations in the hills," and stated that "the discipline and conduct of the men who were placed at his disposal for punitive measures against the Kukis had at all times been most excellent." Lieutenant-General Sir H. D. Keary transmitted these commendations to the Lieutenant-Governor, adding his heartiest thanks to all for their fine efforts and whole-hearted co-operation, and congratulating all on the extremely successful issue of their efforts. Fourteen honours were gained by Indian officers and men for good work in connection with these operations.

In the beginning of November 1919, reports were received of unrest on the Yünnanese Frontier, where a Burmese pretender named Saw Yan Baing was said to be raising forces in the Shan States on the Chinese side for an attack on Burma. As a precautionary measure all frontier outposts were brought up to full sanctioned strength, signalling communications between different frontier stations were secured and to increase the defensive powers of the frontier posts, six Verey light pistols with adequate ammunition were supplied to each of the Bhamo, Myitkyina and Northern Shan States Battalions. A temporary post of 30 Mounted Infantry was encamped at 17½ miles on the Momauk-Tunhong Road. Temporary posts with 50 rifles at each were established at Nampaung and Myothit Mr. Körper, the Assistant Superintendent, Kutkai, with an escort of 25 men was ordered to Namkham to patrol over the North-West Borders. The strength of the Kutkai post was reinforced and Major Tilly proceeded to arrange for a moveable column. Two Lewis guns were ordered from Mônywa to Lashio and orders for the immediate despatch of the Tawnio column were issued. The Molo

post in the Ruby Mines District was temporarily re-established and a striking force of 75 men was posted there. Talawgyi post of the Myitkyina Battalion was temporarily re-established and a base with 100 men was opened at Kazu. To effect these reinforcements, the following men were moved from different Battalions, 391 to Northern Shan States, 268 to Bhamo, and 231 to Myitkyina.

On the 3rd December a report was received from the Deputy Commissioner, Bhamo, that a party of 40 Shan Chinese had attacked the Tunhong outpost. The attack was repulsed and the enemy fled leaving 5 dead. This was the only actual attack made although there were many rumours of anticipated attacks at different points along the frontier.

With effect from the 9th December 1919, the Government of India ordered the control of the defensive operations by the Military Police on the Yünnan Frontier to be handed over to the General Officer Commanding, Burma Division. The operations continued under military control till after the end of the year, senior Military Officers being sent up to Myitkyina, Bhamo and Lashio, to assume military command of defensive operations in their respective districts. Regular Army reinforcements were also sent up to Myitkyina, Bhamo and Lashio to remain at these stations ready in case of emergency.

In connection with active service overseas, the termination of the Great War put an end to the need for Volunteers. The war casualties reported during the year amounted to 99. Twenty-nine war honours were gained during the year, which brings the total number of honours to 77, according to the following list: Military Crosses, 2; Indian Orders of Merit, 11; Indian Distinguished Service Medals, 38, Meritorious Service Medals, 17; Orders of British India, 3; Croix-de-Guerre, 2; Cross of St. George, 1; Médaille Militaire, 1; and Bars to Indian Distinguished Service Medals, 2.

The Burma Military Police volunteers continued to earn the commendations of their Commanding Officers. The drafts which went to the 1/4th Rajputs and to the 92nd Punjabis were mentioned in terms of the highest praise on demoblisation, by their respective Commanders, and the formal thanks of the Government of India were conveyed to them through the Local Government. The 85th Burma Rifles, after spending two years in Mesopotamia were sent in May 1919 into Kurdistan to quell Shaikh Mahmud's rebellion, and did excellent work.

The total cost of the Military Police force for the financial year 1919-20 amounted to Rs. 73,27,556, compared with Rs. 72,76,839 in the previous year. The total increase during the year under review was Rs. 50,717. The increase of Rs. 2,49,114 under "Pay," Rs. 19,643 under "Hospital Charges" and Rs. 2,49,853 under "Police Food Supply" was due to surplus Indian officers, non-commissioned officers and

men, to increased cost of medicine, and to articles of food supply respectively. The decreases of Rs. 2,78,177 under "Other Expenditure" and Rs. 1,89,716 under "Debited through Exchange" were due to the termination of the Kuki Operations and to there having been no re-armament of the Military Police Battalions during the current year. The expenditure under "25C.—Political" was Rs. 4,78,634 compared with Rs. 4,50,752. The increase was mainly due to increased cost of articles of food and of transport.

The health of the force was once more indifferent: 885 men died or were invalided, as compared with 813 in the previous year, 631 proceeded on sick leave, and 26,364 were admitted to hospital, the respective figures for 1918 being 647 and 19,689. The Chindwin, Myitkyina and Shwebo Battalions show the largest increases in admissions to hospital. In the first case the rise is mainly due to the fact that the numbers of the Battalion in the Upper Chindwin District were increased from 263 to 850 owing to the establishment of various outposts in the Somra Tract, which is very malarious. There was a slight outbreak of cholera here as well. Mortality from plague and small-pox was negligible, but the influenza outbreak of 1918 continued throughout the year in several Battalions. Inoculation was introduced, and proved to be efficacious. Eleven cases of blackwater fever were reported from the Myitkyina Battalion, and two of these were fatal.

Recruiting was stopped during the year, pending the return and reabsorption of men who had joined the Indian Army for active service. But before these orders had issued 45 recruits had been enlisted in India by the recruiting parties, and 39 in Burma. Forty-five of the recruits were Gurkhas, and 14 were Chins. A physical training and bayonet exercise course was inaugurated at Maymyo under the Supervisor of Physical Training, Burma Division. Two classes were held and 64 members of the force obtained instructors' certificates. An interesting experiment was the holding of a class in Rangoon for instruction in the care, breeding and training of carrier pigeons. This will not be repeated, as the carrier pigeon service has been abandoned as being unsuitable for jungle warfare. Twenty-eight out of 29 entrants passed in the Poona courses for physical training and bayonet-fighting and 4 out of 6 gained certificates in the musketry course at Pachmari. Six non-commissioned officers attended a signalling class at Lucknow, and all passed. Four members of the force were sent for training in the Lewis gun to Satara: all qualified and one Havildar obtained a "distinguished" certificate. Altogether an excellent record for the year's training.

The sanctioned strength of mounted infantry ponies remained at 1,000, but there was a shortage of 170 ponies at the close of the year. The purchase of remounts had been stopped as it was anticipated that the active service contingent of mounted infantry would return to Burma at an early date, with 400 ponies for reabsorption.

But the unit was detained in India, and 69 remounts were eventually purchased at the end of the year. Epizootic disease was slight in its incidence, the highest mortality being 8 from anthrax and 6 from surra.

The sanctioned strength of transport ponies and mules was reduced from 1,180 to 1,105. The reductions were effected in the Chindwin, Mandalay and Shwebo Battalions. From the savings effected the Mandalay Battalion provided itself with a train of six bullock carts for the conveyance of baggage at headquarters. Difficulty was again experienced in hiring transport in the Shan States, and 20 carts were purchased for the Northern and 10 for the Southern Battalion. The actual strength of the transport ponies and mules was 851: there was thus a shortage of 254, which could not be replaced owing to the prohibitive cost of mules. The health of the animals continued to improve. Of contagious diseases, Surra was responsible for a death roll of 24, and anthrax for a death roll of 11. Thirty-six transport animals were purchased during the year to replace casualties.

Twelve thousand and thirty-four men fired the annual musketry course as against 11,222 in the preceding year. The Bhamo, Southern Shan States and Chin Hills Battalions, in the order named, obtained the highest averages. The Reserve Battalion, for the fourth year in succession, won the Parkin Cup competition. The total number of casualties increased from 1,680 to 1,943. The rise is to be explained by the fact that throughout the war resignations were practically forbidden, and many veterans whose time for retirement came during this period were induced to remain in the force in order to allow their juniors to volunteer for active service. Accordingly after the close of the war there was an abnormal increase under both these heads. On the other hand, deaths, dismissals and desertions all exhibited a substantial decrease. Over 50 per cent. of the desertions occurred among Karens and Kachins, and the remainder chiefly among Gurkhas who failed to return after furlough. The high price of foodstuffs may have been one of the causes of the prevalence of desertions among these indigenous races, who are in receipt of no ration concession. The number of punishments awarded decreased from 1,454 to 1,267: the decline affected every battalion except two. Shortage of strength, the absence of recruits, relaxation of supervision, and the fact that a large number of the force were on active service for six months, are amongst reasons for this decrease. Numerous rewards were given for good work.

There was no change in the armament of the force during the year, though a certain number of Lewis guns were lent to some of the frontier battalions from the Rangoon Arsenal. Comments of inspecting officers were generally favourable, but in nearly every case stress was laid on the disadvantage under which training was carried out owing to the paucity of British Officers.

Rangoon Town Police.

44. The sanctioned strength of the men of the Rangoon Town Police remained at 1,246. The cadre of officers was diminished by the three temporary European Sergeants entertained in 1916 in connection with a Customs Launch patrol between the Hastings and the mouth of the Rangoon River. The actual strength on December 31st, 1919, was short of the sanctioned strength by five officers and 54 men. As regards the officers, one vacancy was in the grade of Imperial Police Officer, two in the grade of Sub-Inspector, and two in the grade of European Sergeant. The number of men enlisted rose from 203 to 225, but the difficulty of obtaining recruits of a suitable type, both from among Indians and Burmans, was reported to be as great as ever.

The cost of the force increased by nearly half a *lakh* to Rs. 7,52,131. One officer and 14 men were dismissed, two officers and 27 men removed and 15 men discharged. Twenty-one officers and 173 men were otherwise departmentally punished. This record is considerably worse than that of 1918, but the conclusion of hostilities afforded an opportunity for tightening discipline, and getting rid of certain undesirables. Four officers and 89 men resigned as against one officer and 89 men in the previous year. The officers resigned in order to better themselves; the men because they could not obtain leave. One officer and 21 men died, and three officers and 32 men retired on pension or gratuity. There was a slight increase in the number of officers, and a considerable decrease in the number of men, who received money rewards, but the funds at the Commissioner's disposal are inadequate, and some men who had earned rewards were obliged to forego them. Good conduct stripes increased from 35 to 85, or by over 100 per cent. The statistics concerning other species of reward do not call for comment. Two hundred and twenty-six men passed through the Training Depôt as against 207 in the previous year. Recurrent training was once more impossible owing to the shortage of strength. Some additional accommodation was provided at the Myenigôn Police-station. Schemes for the improvement of nearly every station were in hand at the end of the year, but much still remains to be done in this direction.

There was an increase of 341 true cognisable cases of crime proper and of 1,277 cases under special and local laws. With the steady growth of Rangoon a corresponding increase in the volume of crime is but to be expected: in the year under report high prices, and the presence in the town of undesirables from Labour Corps and other disbanded units have been aggravating factors. There was no crime of a political nature, but during the year action had to be taken against some of the local presses, and security was taken for their future good behaviour. None of the more serious crimes reported presents any features of particular interest, but their perusal gives some insight into the dangerous life which the

unarmed night patrol is called upon to lead. Three constables were shot, one of them dying of his wounds, while a fourth was stabbed.

Offences against the State increased by 56 cases to 113. The increase is mainly due to the large number of cases in which forged currency notes were handed over to the Police by the Bank of Bengal, or the Currency Office, in the way of routine. No police case, in the popular sense of the term, arises from these transactions as a rule. Serious offences against the person declined by 15, the most marked decrease occurring under the head of simple hurt, a form of crime which is only to a limited extent controllable by the Police. Other variations are too slight to possess any significance. Serious offences against property increased from 199 to 240, the chief contributor being the offence of lurking house-trespass. The only remedy is considered to lie in better night patrolling, which must wait upon a strengthening of the force. A feature of some of the robberies reported is the daring manner in which they were committed at a time when the streets were full of people. There are several gangs of robbers in Rangoon who are well known to the police, and it is believed that if the public were not afraid of reprisals they could do much to aid the force in breaking up these gangs. Minor offences against the person remained at the level of the previous year. Minor offences against property, on the other hand, increased by 162, the most important rise, 152, occurring under the head of ordinary theft. Recoveries of stolen property declined from 48 to 47 per cent.

Rather less activity was shown by the Rangoon Police under the Excise Act; 81 cases being taken up by them, as against 112 in the preceding year. The high percentage of convictions was maintained, all but 5 of these prosecutions being successful. Opium cases taken up by the police increased from 78, with 71 convictions, to 96, with 85 convictions. There were 202 prosecutions under the Gambling Act as against 258, the percentage of conviction falling from 91 to 85. Cases under the Arms Act declined from 32 to 21, in all of which convictions were obtained. The only firearms seized were two revolvers. Action was taken under the Rangoon Police Act in 397 cases as against 314, the percentage of convictions declining from 90 to 88. But the chief contributor to the large increase in the sphere of miscellaneous crime is the head of public and local nuisances: the rise is attributed to greater energy on the part of the police, and to the housing trouble which has arisen from the congestion of the city.

Bad livelihood cases are practically non-existent in Rangoon, the relevant sections of the Criminal Procedure Code being replaced to a great extent by the preventive section of the Rangoon Police Act. The year opened with 498 criminals under surveillance, and closed with 589, of whom 126 were in jail. Of 58 absconders proclaimed during the year 23 were arrested, in addition to 17 old absconders of previous years,

and 63 absconders wanted by other districts. Prosecutions for drunkenness increased from 1,063 to 1,352. Forty-seven ward headmen received rewards in money for good work, and several more were rewarded by laudatory endorsements on their appointment orders. One hundred and six vernacular plays were censored by the police, of which four were wholly or partially rejected on religious grounds. The number of cinematograph films censored by Sub-Committees established for this purpose, rose from 978 to 1,074: seven were rejected wholly or in part. The volume of this work will be considerably lightened by the issue of orders, since the close of the year, exempting films already certified in Bombay or Calcutta from further inspection in Rangoon.

Prosecutions instituted by the Port Police for breaches of port and harbour rules increased by 200 to 2,373. Four cases of rice-theft and one of paddy-theft were reported, and all ended in conviction. There was an improvement in the working of the River Police.

The working of the Hackney Carriage Department was unsatisfactory, and demanded the personal supervision of the Commissioner of Police. There was a considerable increase in the number of licensed rickshaw pullers, who at the close of the year were nearly 3,000 strong.

Village Administration.

45. As a result of the vigorous continuance of the policy of amalgamating village-tracts, the number of headmen in the Province again fell considerably during 1919, the decrease being 593 to 15,661. In 1909 the number was 17,980, so that in ten years there has been a decrease of 2,319. To achieve the happy mean, the combination of adequate emoluments and efficient administration, a properly considered scheme of amalgamation for each district is now regarded as desirable, and amalgamation, while necessarily effected as vacancies occur, should not be left to be determined by the particular vacancy. Where the hereditary principle is still strong, the village whose headman's family has a stronger traditional claim than the families of headmen in the other villages in the tract to be amalgamated, should ordinarily supply the headman for the tract. Elsewhere the considerations of administrative efficiency, internal communications and the remuneration of the headman, together with the wishes of the inhabitants, should be the deciding factors. The number of Circle headmen, as distinct from Village headmen, fell by 9 (being the result of a policy of abolition of these charges), and the number of subordinate headmen not receiving full commission was consequently lowered by 267. Demarcation of village-tract boundaries made satisfactory progress, but in view of the village-tract's position as the geographical unit of the rural self-government scheme, standardisation has been recognised as desirable, and instructions were issued to make boundaries correspond as far as possible with the boundaries of *kwins*

which form the basis of the Land Records Department maps and registers. Shifting cultivation, local habits, floods and unduly complicated overlapping may affect in some areas the accomplishment of this object, but the general principle of standardisation is to be recognised as attainable.

While the total number of headmen is falling, the number of those entrusted with special judicial powers continued to increase, and at the end of the year those holding special criminal and special civil powers respectively were 1,874 and 2,070, as compared with 1,826 and 1,981 at the close of 1918, and 935 and 1,223 in 1909. The judicial work of the headmen is generally reported good, only 755 orders out of a total of 30,767 being either reversed or modified, but the possession of special judicial powers is still looked upon rather as a personal dignity than a responsibility; yet a more extensive use of these powers would benefit litigants and diminish the routine work of Subordinate Courts. Proposals to establish village courts which were warmly supported, have been deferred pending experience of rural self-government, but the powers of Honorary Magistrates under section 15 will be given to benches of headmen where fit and when arrangements for training, keeping of records and provision for establishment have been made. Inequality in the exercise of power and the need of training are indicated in the fining of a headman for suppressing evidence in a witchcraft case and in the action of another who fined a villager for using a piece of bamboo instead of a proper flute on the ground that ill luck would follow the use of bamboo for musical purposes. Fines inflicted by headmen rose from Rs. 1,28,142 to Rs. 1,64,000, the increase being general.

Although the average commission drawn by a village headman in 1918-19 was only Rs. 161, competition for the post shows no sign of diminishing, and improvement in the educational attainments of headmen is reported. The proposal that headmen be not eligible for election to the Circle Boards shortly to be created, would, if accepted, lower their position to that of petty local officials, whereas the gradual growth of the group system of headmen offers scope for the development of a sense of dignity and corporate responsibility. The co-operation of village authorities is essential to the success of the Circle Boards.

Relations between headmen and the police are generally reported excellent, several villages showing remarkable energy in following up dacoits. The experiment of arming selected headmen with guns for protection of their villages continued to justify itself, no abuse of the privilege having been reported. In Excise matters the assistance rendered was not so good, especially in Upper Burma. Excise policy, which is complicated by the universality of toddy palms, is often not understood by headmen, but some of them have aided the formation of temperance societies which may effect much by the creation of a healthy public spirit on the subject of drink and gambling. Sanitation, except in

the sense of a clean-up before an official visit, makes an even slighter appeal to the headmen than Excise, and until organised sanitary staffs are employed by District Councils and Circle Boards, real progress cannot be expected.

Valuable work continued to be done by headmen in dealing with epidemics of cattle disease, also in distribution of relief in districts where scarcity due to floods prevailed. Collection of revenue was as usual honestly and punctually done, cases of favouritism or misappropriation being remarkably few except in Akyab.

Punishments inflicted on headmen fell from 703 to 627 (Arakan and Sagaing alone showing increases) and rewards from 2,633 to 2,261. Local practice varies considerably in the infliction of punishments for bad work, and suspension, as a substitute for either removal or fine, is recommended. With their increasing responsibilities and temptations in view the fall in the number of headmen punished is welcome. A proposal to appoint a subordinate village official to relieve the headman of some of his routine duties and supplement the collection of information, was discussed and approved, but is held in abeyance by financial considerations pending the readjustments following rural self-government.

Fines inflicted on village-tracts numbered 172, aggregating Rs. 53,937 against 180 and Rs. 56,743 in 1918, Prome, Yamèthin, Tharrawaddy and Pegu being conspicuous for the number of fines inflicted. Attention has again been drawn to the necessity of exercising with caution the power of fine, the expectation of a high standard of courage from unarmed villages attacked by armed dacoits not justifying the application of section 13.

The importance of efficient village administration as a check on crime and an aid to revenue collection has been more than ever kept in view, and the need for readjustment of the village system to changing political conditions, while recognised as desirable, has not delayed the introduction of experiments likely to prove beneficial.

Wild animals and snakes.

46. During the year 1919, 151 persons were killed by wild animals other than snakes, as against 95 in 1918, and 81 in 1917. The divisions exhibiting the largest individual increases are Pegu and Mandalay. In the former the Prome District shows a rise of 24 deaths, for which tigers and panthers were responsible, while the chief contributor to the swollen figures of the Mandalay Division was Katha, which reported an increase of 24 deaths from the bite of tigers. The last named animals were as usual the most destructive to human life, and caused 91 deaths as against 53 in 1918. Leopards come next, accounting for 24 deaths as against 8 in the preceding year. Elephants killed 15 persons, as against 7, and bears 5 as against 8. The remaining 16 casualties were due to other wild animals.

There was a considerable increase from 1,336 to 1514 in the mortality from snake-bite. The largest divisional increase, of 204, occurred in Meiktila, where the Myingyan District recorded a rise of 178 deaths. The Sagaing District showed a substantial decrease from 246 deaths to 63. All the Lower Burma Divisions except Arakan suffered more from snake-bite than in 1918.

The number of wild animals, other than snakes, destroyed, rose from 4,832 to 5,044, and the rewards paid from Rs. 70,227 to Rs. 81,685. The number of elephants killed increased from 103 to 127, out of which the Ruby Mines District was responsible for 116. The number of tigers destroyed advanced from 519 to 663, the Tenasserim Division alone recording an increase of 102, with the Amherst District as the chief contributor. The number of leopards killed amounted to 2,359, a decrease of 36 on last year's figures : 1,550 bears were destroyed, as against 1,333—the largest increase, 136, was recorded by the Chin Hills. The destruction of other animals declined from 482 to 345 : there was a decrease of over 200 among the wild pigs destroyed in the Upper Chindwin District, and a rise of nearly 100 in the number of wild dogs killed in the Chin Hills. The number of snakes shown as having been destroyed declined from 13,136 to 10,640. The figures are certainly incomplete, as is shown by the fact that half the districts show a blank return. Of those submitting statements the Tharrawaddy District exhibits the largest decrease, from 5,371 to 3,692. The number of gun licenses granted for the protection of crops, and for the destruction of wild animals decreased slightly from 7,726 to 7,338. Of these 2,037 were held under the Indian Arms Act, and the rest under various special laws applicable to hill tracts.

Criminal Justice.

47. General. No Additional Judge was appointed during the year to the Chief Court, and for a short period in May and June 1919 only four Judges were sitting. There was no change in the jurisdiction of Sessions Judges in Lower Burma; the District Judge, Akyab, was appointed Additional Sessions Judge, Arakan, for a short period, and a special Additional Sessions Judge was appointed for about a month in the Tenasserim Division. An Additional District Magistrate was employed in the Amherst District for a few months at the beginning of the year. Two new Benches of Honorary Magistrates were created, bringing the total number up to 60.

In Upper Burma there was no change in the jurisdiction of the Courts except in the Myitkyina District, which was cut up into six sub-divisions with effect from the st July 1919. The District Magistrate of Kyauksè was appointed an Additional Sessions Judge of the Meiktila

Division for a week in November. Two Magistrates were invested with special powers under section 30 of the Criminal Procedure Code.

The main feature of the year was the considerable increase in the number of cases which came before the Courts, the number of the cases being 5,856 more in Lower Burma and 3,968 more in Upper Burma than in the preceding year. These increases occurred alike under the Indian Penal Code and under special and local laws. Inspections were generally adequate in Lower Burma; in Upper Burma more remains to be done by Subdivisional Magistrates.

Cases.

48. The total number of offences reported during the year in Lower Burma was 80,737, of which 63,678 were found to be true. 38,382 of the cases reported were under the Penal Code, and 42,355 under special and local laws. All districts but four contributed to the rise, but the very large increase of 2,417 cases is due mainly to cases under the Rangoon Police Act and the Rangoon Hackney Carriages Act. Of the other districts Prome, Tharrawaddy and Thatôn recorded the largest increases. The percentage of true cases to cases reported rose slightly from 78·35 to 78·87, the lowest percentage, 67, being returned by the three northern districts of Arakan.

Under the Penal Code the number of true cases affecting the human body increased from 6,663 to 7,290. True cases of murder increased by 60 to 343, of hurt by 405, of criminal force and assault by 142; but of the hurt cases the increase of those classed as grievous was eight only. Cases under the Excise Act showed a decrease of 633, which is attributed to the effect of severe penalties inflicted on the manufacturers and purveyors of illicit liquor under the new Act, and the introduction of the toddy tree tax system in certain districts. There was an increase of 261 true cases under the Gambling Act, and the complaint is still made that too much attention is paid to the casual player, and too little to the promoter of gambling. There was a decrease of 103 prosecutions under the Village Act, and the poor record of convictions suggests that prosecutions are still being undertaken without sufficient discrimination. The number of cases instituted under the Workman's Breach of Contract Act increased from 1,468 to 1,109. The Thatôn and Mergui Districts provided most of the increase, and about one-half of the total cases. Magistrates appeared to be gaining a better knowledge of its provisions, but the Thatôn District showed a very high proportion of abortive proceedings. There was a welcome rise from 3,281 to 4,064 in the number of cases in which complaints were summarily dismissed, but the Honourable Judges point out that there is still further room for improvement, especially in connexion with such *quasi*-civil matters as trespass, where the institution of a criminal case is often merely a strategic move.

In Upper Burma reported cases under the Penal Code increased from 12,527 to 15,060; of these 10,847 were returned as true, a rise of 2,027 over the figure for 1918. True cases of hurt increased by 346, and of criminal force and assault by 116, while there were slight decreases in attempts to commit murder and culpable homicide. Dacoities increased by 6, but the greater part of the rise in offences against property occurred under less serious heads: thus cases of theft and receiving stolen property increased by 453, criminal trespass by 222, lurking house trespass by 167, and cattle theft by 159. No one district exhibited any very marked variation from last year's figures, except, perhaps, Myingyan, whose large increase under the head of cattle theft is explained by the fact that the leading cattle-thief having been sentenced to a long term of imprisonment a large number of old cases, which the victims had hitherto been afraid to report, were brought to light. Offences reported under the Municipal Act increased by 1,173, the Mandalay District having an increase of 946, and Magwe an increase of 289. There was however a decrease of 248 in the number of cases reported under the Railways Act, and of 36 under miscellaneous special and local laws. Offences under the Excise Act increased by 110, and under the Gambling Act by 774. Cases reported under the Forest Act rose from 389 to 408: a large increase in Kyauksè was due to the raking up of old cases in consequence of a quarrel between two dishonest officials who had previously combined to suppress them. Other variations between the figures for this and the previous year do not call for comment. As in Lower Burma there was an improvement in the number of complaints summarily dismissed under section 203 of the Criminal Procedure Code: the respective figures are 847 and 1,063 and this improvement was most conspicuous in the Mandalay, Magwe and Yamèthin Districts. Honorary Magistrates are reported to be reluctant to dismiss complaints.

Disposal of cases.

49. In Lower Burma the number of cases brought to trial during the year rose from 71,145 cases, involving 125,936 persons to 76,776, involving 132,204 persons. Of these cases, 35,981 were under the Penal Code, and 40,795 were under Special and Local Laws. The number of persons remaining under trial at the end of the year declined from 7,422 to 5,988, a very creditable record in view of the increased volume of work. The percentage of conviction, committal and reference in Magistrates' Courts declined from 62·78 to 62·61. The Honourable Judges attribute this low percentage in part to the inefficiency of the Police, and in part to the reluctance of witnesses to come forward. As a remedy against the latter evil they have submitted proposals for doubling the scale of witness-fees. District Magistrates disposed of 615 cases as against 476. The number of cases tried with special powers under section 30 of the Code of Criminal Procedure was 1,862, or one more

than last year; of these 300 were taken up by District Magistrates. Stipendiary Magistrates, other than District Magistrates, disposed of 49,983 cases under ordinary powers as against 46,743. Benches of Honorary Magistrates disposed of 23,001 cases of which 13,748 were in Rangoon.

Proceedings with a view to demanding security for keeping the peace were taken in only 34 cases, as against 76 in 1918. One hundred and two persons were involved, of whom 24 were discharged, and 78 called on to furnish security. Security for good behaviour was demanded in 1,203 cases, involving 1,218 persons: of these 202 were discharged, and 933 called upon to furnish security, the cases of the others remaining pending. The percentage of successful prosecutions rose from 80·07 to 81·99. Most districts attained a high level in this respect, but abortive proceedings were far too common in Mergui and Bassein. Sixty-eight persons were bound down under section 17 of the Gambling Act, and 179 under section 3 of the Opium Law Amendment Act. The number of cases committed to Sessions rose from 439 to 463, but the number of persons under trial during the year declined from 823 to 805. The percentage of convictions showed a slight decline to 53·48 and it is clear that committing Magistrates are still reluctant to take the responsibility of discharging an accused person when it is obvious that the case will merely waste the time of the Sessions Judge.

The number of cases committed to the Chief Court rose from 54, involving 66 persons, to 61, involving 89 persons. Sixty-two cases, involving 90 persons, were disposed of. The percentage of convictions declined from 76·56 to 67·78.

The average duration of all criminal trials decreased by one day, from 17 to 16 days. Stipendiary Magistrates and Courts of Sessions show an improvement, Benches of Honorary Magistrates are stationary while the Chief Court and District Magistrates are retrograde. The Sandoway, Hanthawaddy and Toungoo Districts effected the largest average reductions in duration. The number of witnesses examined rose from 277,527 to 291,796.

In Upper Burma the number of cases brought to trial rose from 27,626 to 32,348, of which 14,835 were under the Indian Penal Code, and 17,513 under Special and Local Laws. The total number of persons under trial increased from 49,674 to 61,463. The percentage of convictions in Courts of Sessions declined from 54·68 to 52·21, and in Magistrates' Courts from 60·37 to 59·94, the Myingyan District having the very low figure of 42·64. The number of cases disposed of by Stipendiary Magistrates sitting singly, excluding District Magistrates, rose from 18,619 to 22,400, by District Magistrates from 273 to 396, and by Benches of Magistrates from 7,330 to 8,735. Next to the Mandalay Bench, which disposed of 6,433 of these cases comes the Magwe Bench with 573. The Benches in the Upper Chindwin District were found to

be superfluous owing to the dearth of criminal work. The number of cases in which proceedings were taken with a view to demanding security for keeping the peace rose from 19, involving 27 persons, to 22 cases involving 43 persons. Cases of security for good behaviour rose from 507, with 513 persons, to 585 with 596 persons. The percentage of successful prosecutions was 97·67 in the former class and 83·71 in the latter. The number of persons imprisoned in default of security rose from 86 to 110. The number of cases committed to sessions fell from 151, involving 291 persons, to 130, involving 238 persons. The number disposed of was 150, concerning 226 persons, as against 159 cases with 278 persons, in the preceding year.

The average duration of cases rose by one day from 13 to 14; the highest district averages were shown by Myingyan, Sagaing and Shwebo. The total number of witnesses examined increased from 89,047 to 97,727.

Punishments.

50. In Lower Burma the number of death sentences referred to the Chief Court for confirmation fell from 71 to 59; in 30 cases the sentences were confirmed, in 8 they were reversed, in 9 altered or reduced, and in one case a new trial was ordered. Four persons were sentenced to death by the Chief Court sitting as a Court of Session. The total number of persons sentenced to death thus fell from 45 to 34. The number of persons sentenced to transportation or penal servitude decreased from 373 to 319, and the number of persons sentenced to imprisonment for more than two years showed a slight decrease from 1,306 to 1,282. Sentences of imprisonment for fifteen days or less increased from 1,928 to 2,128, and the number of imprisonments till the rising of the Court from 1,477 to 1,622. There can be no doubt that the vast majority of these sentences involved an evasion of the spirit of the law, and the Honourable Judges were constrained to point out that the passing of such sentences can only be justifiable in wholly exceptional cases. There was a considerable increase from 1,811 to 2,225 in the number of sentences of whipping. The increase was general and corresponds with the rise in the number of petty offences against property; only four districts showed a decrease. The number of illegal sentences of whipping declined from 19 to 13, but there is clearly no excuse at this hour of the day for their being any at all. In subsequent cases of this nature the Honourable Judges propose to report the offending Magistrate without further warning, for a reduction of his powers.

The number of persons sent to jail for failure to give security declined from 669 to 589. It is thought that in cases where security is not forthcoming a more extensive use of the Habitual Offenders Restriction Act will supply an effective alternative, which will cause a great reduction in the number of persons imprisoned for failure to furnish security.

The amount of fines imposed increased from Rs. 5,85,488 to Rs. 6,48,530. The increase is attributed to heavier fines inflicted under the Excise Act. The amount struck off as irrecoverable rose from Rs. 52,481 to Rs. 56,037. The amount of fines paid to complainants by way of compensation under section 545 of the Code of Criminial Procedure increased from Rs. 30,230 to Rs. 38,296. Thirty-three persons, or two more than in the previous year, were ordered to pay compensation for bringing frivolous and vexatious complaints. The number of persons released on probation under section 562 of the Criminal Procedure Code increased from 1,102 to 1,377. Only 13 of these, or 1 *per cent.* were convicted for breaches of their bonds. Of youthful offenders 16 were discharged after admonition and 16 were delivered to parents or guardians under section 31 of the Reformatory Schools Act: last year's figures were, respectively, 17 and 40. The sentences of 20 boys were commuted to detention in a Reformatory School, as against 21.

In Upper Burma 14 death sentences were confirmed by the Judicial Commissioner, as against 12. The number of persons sentenced to transportation declined from 92 to 88, while the number of those rigorously imprisoned increased from 2,923 to 3,661. Whippings in lieu of other punishment rose from 533 to 750, and whippings in addition to other punishment amounted to 9, as in the previous year. Simple imprisonments increased from 365 to 377. There was an increase in the number of persons imprisoned for less than 15 days, and in the number of those imprisoned till the rising of the Court, especially in Mandalay.

The amount of fines imposed was Rs. 3,56,660, a very considerable advance upon last year's figure of Rs. 2,35,595. All but some Rs. 30,000 were realised. The amount paid by way of compensation under section 545 of the Criminal Procedure Code increased from Rs. 17,481 to Rs. 24,698. Compensation paid under section 250 increased by some 120 rupees, but, as in Lower Burma, insufficient use was made of the section.

Appeals.

51. The number of persons who presented appeals against convictions in Lower Burma increased from 7,376 to 7,748. Appeals before the Chief Court increased from 848 to 919, before Courts of Sessions from 4,600 to 5,127, and before District Magistrates and Magistrates specially empowered under section 407 of the Criminal Procedure Code, from 829 to 886. The Local Government preferred appeals in the Chief Court against the acquittals of seven persons, but in only two cases was the appeal successful; the figures for last year were 7 and 1. The percentage of sentences confirmed to the total disposed of by all Appellate Courts remained practically at last year's figure, the actual increase being from 67·27 to 67·38, but the Chief Court reported a sensible rise

from 71·87 to 78·65. There was little variation between the figures of the various Sessions Courts, but the fluctuations between the different District Courts were considerable: five of the latter recorded less than 40 *per cent.* of confirmations. The averge duration of appeals in all Courts declined from 22 to 17 days. In the Chief Court duration fell from 37 to 29 days, in Sessions Courts from 22 to 16, and in District Courts from 11 to 10. These figures are considered to be extremely creditable.

In Upper Burma the number of persons who preferred appeals before the Judicial Commissioner decreased from 273 to 260, but in Sessions Courts it rose from 1,211 to 1,624, and in the Courts of District Magistrates from 869 to 1,354. The percentage of confirmation in all Courts rose from 60·36 to 61·31. In the High Court it rose from 65·67 to 66·67, and in Sessions Courts from 67·75 to 71·92. In the Courts of District Magistrates it declined from 48·70 to 47·76. The average duration of appeals fell from 18 to 15 days, all classes of Courts showing an improvement. The Local Government preferred two appeals against acquittals: both were successful. These figures are identical with the figures of 1918.

Revisions.

52. The number of cases dealt with on revision by District Magistrates in Lower Burma was 8,116, involving 15,792 persons, as against 7,095, involving 14,257 persons. The number of persons regarding whom further enquiry was ordered rose from 180 to 188, but the number of those whose cases were referred to the Chief Court declined from 383 to 248. The number of persons whose cases came before Sessions Judges rose from 4,564 to 6,134. Further enquiry was ordered in the case of 36 persons as against 37, and the cases of 190 persons were referred to the Chief Court, as against 202. The Chief Court called on its own motion for 716 cases, affecting 1,059 persons, as against 625 cases, affecting 965 persons. The number of cases referred and applications for revision declined from 587, involving 856 persons, to 405, involving 701 persons. The orders of Lower Courts were confirmed in the cases of 1,284 persons, and reversed in the cases of 250, a much better record than that of last year, when reversals amounted to more than half the number of confirmations. The sentences of 14 persons were enhanced and of 240 persons were reduced, while new trials were ordered in the cases of 56.

In Upper Burma the number of cases dealt with on revision by District Magistrates rose by one-third, from 3,031 to 4,079. The number of cases called for by them under the Criminal Justice Regulation was 2,224, and otherwise, 1,986, the percentages of confirmation being respectively 91·64 and 96·34. The number of persons whose cases were dealt with on revision by Sessions Courts rose from 1,436 to 1,861, and in the cases of 1,447 the original order was confirmed. The Judicial

Commissioner had before him on revision the cases of 2,649 persons, very nearly the same number as in the previous year. In the cases of 2,101 the sentence or order was confirmed, of 28 the sentence was enhanced, of 102 reduced or otherwise altered, and of 294 reversed. In the case of 11 further enquiry was ordered.

Prisons.

Accommodation.

53. Excluding hospitals and observation cells, accommodation was available for 16,958 male and 313 female prisoners, against 17,016 and 313, respectively, in the previous year. At Katha, the ward for undertrial prisoners was extended so as to provide additional room for 6; at the Maymyo Extramural Jail the accommodation was raised from 540 to 620, and the extensions to the Insein Central Jail accounted for an increase of 444, all these figures yielding a total of 530. Deducting the verandah accommodation of 588, which is no longer used at Insein, the net decrease amounted to 58 for males, while the figure for females remained the same as in the previous year.

The daily average number of prisoners of all classes was 13,388 (or 680 less than in the previous year) made up of 12,353 convicts, 967 undertrials and 68 civil prisoners. This last named class included persons committed to jail under the "Ingress into India Ordinance," of whom 2 remained from the previous year and 3 were admitted during 1919; of these, 4 were released during the year under review and the fifth was liberated on the 12th January 1920. By order of Government 8 convicts were released on account of sickness and 1,665 on other grounds, the latter including 160 for employment in the Wolfram Mines, 15 for work on Agricultural Farms and 22 for transfer to the Salvation Army Industrial Institute, the balance, *viz.* 1,468, being mainly accounted for by releases under the Peace Clemency Scheme, to which effect was given on the 19th July 1919.

Prisoners.

54. At the beginning of the year, there were 13,816 prisoners of all classes in confinement in the jails of Burma, which, together with 39,848 received by direct admission and by transfer, made a total of 53,664. Of these, 40,036 were discharged from all causes, leaving a balance of 13,628 at the close of the year. The corresponding figures for the year 1918 were 15,962, 37,459, 53,421, 39,605, and 13,816. The number of juveniles under sixteen years of age, admitted to jail, rose from 63 to 101. The Inspector-General remarks that this method of dealing with young delinquents tends to recidivism. The number of male juveniles sent to jail to be whipped reached 522, compared with 246 in 1918. Of the convicts admitted to jail 31·20 per cent. against 31·85 per cent. had been

previously convicted; this seems remarkable seeing that 1,735 more convicts than in 1918 were received in jail. The highest ratios of previously-convicted prisoners were returned by the jails at Prome (49·94), Bassein (47·48), Sandoway (41·67) and Myaungmya (41·36), the lowest ratio being returned by Paungdè (6·82); the figure for the Extramural Jail at Maymyo and the Juvenile Jail at Meiktila was *nil* as in the previous year. The number of youthful offenders, under 15 years of age, fell from 29 to 21, while the number previously convicted rose from 1 to 5, the latter including a girl. Thirteen, or one less than in the previous year, were transferred to the Reformatory School at Insein. Of the 18,468 convicts admitted to jail, 16,231 were Buddhists and Jains, 1,025 were Hindus and Sikhs, 857 were Mahomedans, 77 were Christians and 278 were of all other denominations, representing percentages of 87·89, 5·55, 4·64, 0·42 and 1·50, respectively, against 86·72, 5·44, 5·56, 0·40 and 1·88 respectively in 1918. Of the 18,468 convicts admitted, compared with 16,733 in 1918, 14·80 *per cent.* had sentences not exceeding one month, 19·96 *per cent.* over one month and not exceeding three months, 21·54 *per cent.* over three and not exceeding six months, 18·86 *per cent.* over six months and not exceeding one year, 13·09 *per cent.* over one year and not exceeding two years, 7·87 *per cent.* over two and not exceeding five years, 1·34 *per cent.* over five and not exceeding ten years; 0·02 *per cent.* were sentenced to more than ten years' rigorous imprisonment, 0·66 *per cent.* to transportation for life, 1·48 *per cent.* to term transportation and 0·38 *per cent.* to death; the corresponding ratios for the previous year being 14·82, 19·15, 20·34, 18·60, 13·95, 8·92, 1·18, 0·04, 0·76, 1·75 and 0·49. The percentage sentenced (*a*) to simple imprisonment was 1·49, (*b*) rigorous imprisonment 95·38, (*c*) rigorous imprisonment with solitary confinement 2·98, and (*d*) rigorous imprisonment with whipping 0·15. Item (*b*), it may be remarked, includes 121 prisoners, or 0·65 *per cent.* sentenced to transportation for life, and 274, or 1·48 *per cent.* to term transportation. Among the admissions, 5,461 or a percentage of 29·57 were habituals. Of the former 5,396 were identified before conviction and classed as such by committing courts, 7 were classified by District Magistrates and 58 by Jail Superintendents, the corresponding figures for the previous year being 5,009 or 29·93 *per cent.*, 4,945, 3 and 61.

Discipline.

55. Notwithstanding the fact that the daily average convict population fell from 13,022 in 1918 to 12,353 in the year under review, the number of offences committed rose from 18,459 to 19,317, exclusive of 23 (against 25 in 1918) dealt with by Criminal Courts. Compared with that year, offences relating to (*a*) work, (*b*) prohibited articles, and (*c*) assaults, mutiny and escapes, show an increase of 1,119, 150 and 63, respectively, while all other breaches of jail rules decreased by 474. The total number of minor punishments inflicted by Jail Superintendents was 16,095, of which

separate, cellular and solitary confinement yielded a percentage of 0·88, penal diet 6·61, hand-cuffing and link-fetters 23·82, warnings 24·33 and other punishments 44·36, the corresponding ratios for the preceding year being 1·73, 7·37, 23·55, 22 07 and 45·28. As regards major punishments, which totalled 3,222, penal diet with solitary confinement accounted for a percentage of 0·12, corporal punishment 1·33, combination of minor punishments 3·17, separate, cellular and solitary confinement 18·77, fetters and hand-cuffing behind or to a staple 46·07, and other punishments 30·54, against 0·40, 1·33, 3·68, 13·88, 42·74, and 37·97, respectively, in 1918. Serious assaults were not numerous, but the Rangoon Central Jail again had the misfortune to register a fatal one. The underlying cause of assault was thought to be some imaginary grievance. The number of whippings was 50 compared with 46 in 1918. The cane was not used in eighteen jails, among them being the Central Jails at Insein and Thayetmyo. There were 8 escapes, 4 from inside and 4 from outside the jail, against 9, 3 and 6 respectively, in 1918. Of the 8 who escaped, 7 were recaptured before the close of the year. Habituals whose numbers averaged 5,736, compared with 5,651 in 1918, accounted for 18 of the 23 offences dealt with by Criminal Courts and for 32 out of a total of 43 whippings inflicted on ordinary prisoners. The ratio of the grand total of punishments to the daily average habitual population, works out to 223·99 *per cent.* compared with 204·87 *per cent.* in 1918, which is not improbably due to the concentration of habituals in the larger jails, where discipline is better enforced than in the smaller jails. The total number of casual prisoners employed as convict officers was 5,529 males and 28 females, the punishments awarded them being 7,749 and 27, respectively; the corresponding figures for the previous year were 6,215, 30, 7,515 and 19. The increase in the number of punishments awarded is generally recognized as being due to the inferior type of prisoners whom Superintendents of Jails were obliged to utilize as convict officers. Owing to the release of many of the best men for service in Mesopotamia, on the wolfram mines, and on the 19th July 1919 on account of the "Peace" celebrations, it became necessary to fall back on all kinds of prisoners. In some cases, even men with sentences of six months had to be appointed as convict officers, and as might be expected many of them failed to realize their responsibilities, and helped to swell the defaulters' sheet.

Financial.

56. The total sum expended on guarding and maintenance and the average cost per head were Rs. 11,71,628 and Rs. 87-8-3, respectively, compared with Rs. 10,91,133 and Rs. 77-9-0 in 1918, all the main heads of expenditure showing an increase over that of the previous year except "Establishment," which, as the result of fewer temporary warders being employed during the year under review, showsa decrease of Rs. 2,508. The net cash earnings of convicts sentenced to labour rose from

Rs. 1,96,922 in 1917 and Rs 2,11,633 in 1918 to Rs 2,34,513 in 1919. The value of the vegetables raised in the jail gardens was estimated at Rs. 84,390. Of this sum, Rs. 73,379 represents the cost of supplies for jail consumption, and Rs. 11,011 sales to the public. The value of the convict labour employed by the Government Press and the Public Works Department, for which no credit was given to the Jail Department, was Rs. 59,000, against Rs. 17,622 in the preceding year.

Vital.

57. The number of admissions to hospital, the daily average sick and the number of deaths were 4,611, 263 and 382, respectively, the corresponding figures for 1918 being 7,824, 328 and 360. The ratio, per mille of admissions to hospital, daily average sick, deaths from all causes except cholera, and deaths from all causes, both in and out of hospital, works out to 344·41, 19·64, 25·75 and 28·53, respectively, compared with 556·16, 23·32, 25·59 and 25·59 respectively in 1918. The lessened admission and sick rates are the result of comparative freedom from influenza, for which only 308 convicts were treated in 1919, against 3,560 in 1918. Against the absence of influenza, however, must be set the fact that there were 44 deaths from cholera and 50 from dysentery, while in the year 1918 there was no cholera, and only 20 deaths from dysentery. There were also 16 more deaths from tubercle of the lungs, 7 more from Bright's disease, 6 more from cirrhosis of liver and 4 more from small-pox than there were in the preceding year. The increase in tubercle is probably an after result of the influenza epidemic of 1918. At four of the district jails, *viz.* Sandoway, Mergui, Magwe and Taungdwingyi, against three in the previous year, there were no deaths. Among the seven Central Jails, which accounted for altogether 287 casualties, Thayetmyo (11·26) leads with the lowest death rate, closely followed by Bassein (11·97); the others whose ratio of mortality was an improvement on the preceding year are Rangoon (17·19), Myaungmya (21·65) and Mandalay (38·53); at Insein (36·93) and Myingyan (116·97) the rate was higher than in 1918. The high mortality at Insein was due to an outbreak of cholera which caused 10 deaths, and to the prevalence of dysentery, which accounted for 14 deaths. At Myingyan the abnormal mortality was due to 31 deaths from cholera and 33 from tuberculosis; 26 of the latter were among prisoners received by transfer from other jails. Among the district jails, the Maymyo Extramural Jail returned the lowest death rate, *viz.* (2·19) and Bhamo (173·91) the highest. This latter accounted for 8 deaths, *viz.* plague 4, erysipelas, septicaemia, Bright's disease and dysentery, 1 each At a small jail (like Bhamo), a few deaths sends up the ratio considerably. The highest percentages of opium consumers were returned by the jails at Akyab (37·85), Kyaukpyu (30·85), Sandoway (25·00), Katha (21·93) and Bhamo (20·91). Twenty-seven only, against 58 in 1918, of the prisoners who died were addicted to the opium habit.

58. In the Juvenile Jail at Meiktila there is accommodation for 127 casuals, excluding room for 11 in the hospital. The daily average number was 89, compared with 80 in the preceding year. Only 9 punishments (*viz.* five for assaults and four for other breaches of jail rules) were awarded the juveniles, against 19 in the year 1918, all of them falling in the latter category. The decrease in the number of punishments is attributed to good behaviour and to improvement in moral character. Of the assaults, only one was serious, a convict officer having, with a bunch of keys, struck an ordinary prisoner causing a bad wound in the forehead. On being sent up for trial, the assailant got three weeks' rigorous imprisonment, which involved reduction from convict officership to the "penal" grade. Twenty-four youths, against 25 in the previous year, earned special remission (15 days each) for being free from punishment for a year. A gymnastic and drill instructor has been secured for the jail. Under his coaching, a marked improvement is noticeable, the boys' movements, both inside and outside the jail, being carried out smartly and by word of command. Physical exercises and gymnastics help to instil discipline and to improve the physique of the prisoners, who are, generally, very fit. Education occupies two hours daily, but, as may be expected, is not conducted on the same lines as in free schools. As usual, the forms of employment, to which long-term prisoners were put, were carpentry, cane-work, slipper-making, iron work and timber-sawing, short termers being engaged on gardening and miscellaneous prison services; paddy grinding, a hard form of labour, was generally reserved for those who misconducted themselves. The Burman Jailor (mentioned in last year's report as having been sent on deputation to the Agricultural Farm at Tatkôn) completed his course of training and, on the 30th October 1919, assumed charge of the agricultural work at Meiktila. Under his supervision, and the advice of the Agricultural authorities, a good deal has been done in the matter of preparing the land acquired for an experimental farm, to be run by the jail. It is therefore anticipated that the juveniles will soon begin training in farming on scientific lines, and this ought to be useful to them on release, as most return to the land. A *pôngyi* zealously looked after the ethics of the juveniles. He visited the jail every Sunday and held fifty-two services. The boys were well behaved and listened with interest to his lectures, these chiefly consisting of advice as to reformation in jail, and how to conduct themselves after release.

Miscellaneous.

As usual, young prisoners, both casual and habitual, are kept separate from adults at all central jails and also at a few district jails. These are put to learn carpentry, smith work, tailoring, etc. The daily average number thus employed was 131, which is less than in 1918 owing to the peace delivery. The average earnings per head were Rs. 87-5-6 which is about Rs. 14 better than in 1918. Only four sets of tools were issued to these young prisoners. Experience has shown that these tools

are rarely used after release, and are often sold. It seems abundantly clear that no scheme of training young prisoners in handicrafts, with a view to enabling them to earn a living on release, is of any avail unless it is combined with "after-aid." An association with that object is an integral part of any reform scheme, and this has not yet been arrived at in Burma.

The juvenile school attached to the Rangoon Central Jail was examined by the Education Department on the 6th January 1920 when, out of a class of seventeen, five were examined in Standard I, and the whole declared as passed. The Deputy Inspector of Schools remarked that the school could present pupils for the first standard only, on account of the release of the old pupils. He added that the work of that standard is much improved, especially in object lessons, as the school has now been provided, with pictures of plants and animals, obtained from the Basel Mission. He further remarked that some plants are procurable in the jail and the real objects should be used, if possible, when teaching plant life; also that two qualified teachers are now available in the jail, and that the work will be much better next year.

The question of the separation of habituals from casuals continued to receive close attention. This policy was carried out more fully than before at certain jails, *e.g.* Kyaukpyu, Sandoway, Tavoy, Mergui, Yamèthin, Katha, Paungdè, Myanaung, Bhamo, Shwebo and Taungdwingyi, which now contain no permanent population of habituals. At Mogôk it is not possible to effect this as the jail is primarily intended for Shans, Chins and other Hill-tribesmen. At Mônywa and Shwegyin, habituals remain at present owing to certain difficulties; it may be possible to make them purely "casual" jails in the near future.

By virtue of the remission system 4,779 prisoners cut short their stay in jail. Only one convict who came under this system failed to earn remission. Five hundred and fifty-four convicts sentenced to less than a year earned special remission. Three thousand two hundred and seventy-eight convicts, against 3,161 in 1918, earned special remission, that is, 2,059 for freedom from punishment for a year and 1,219 for good work. The number released on the 19th July 1919, consequent on the grant of Peace Clemency Scheme remission, was 2,077. Of the 12,442 convicts in jail on that date, 1,161 men and 27 women were set free under the 10 per cent. scheme, 11,823 convicts were awarded remission, and 776 of these had to be released on the 19th July; 32 males, who had completed half their sentences, and 63 females, who were sentenced to less than a year, were also liberated on that day. Eighteen convicts, committed to jail for offences against the State, were released under the orders of Government. Only 619 convicts received no special remission of the kind.

Of the 22 prisoners drafted to the Salvation Army Industrial Institution, one broke the conditions under which he was sent and was

therefore returned to jail to work out his sentence. Since the Institution was established in 1916, it has received in all 88 prisoners, of whom only 10 have been remanded to jail. The Government contribution to the Institution during the year 1919-20 was Rs. 5,000. The Inspector-General, who visited the place several times, found everything in good order.

The demand for ticket-of-leave labour fell during the year, so that the number released to employers of such labour was only 175, compared with 508 in 1918. The proposal for establishing a colony for habitual convicts was again discussed at a conference at which Commissioner Mapp of the Salvation Army was present.

The 148th Jail Labour Corps, after a service extending to one year and eight months overseas, returned to Burma on the 27th September 1919, and was demobilized at Thayetmyo. The Inspector of Disciplinary Labour Corps, Mesopotamian Expeditionary Force, has recorded in his reports that the Corps did very good work, and has been very well behaved.

The number of subsidiary jails in Burma during the year 1919 was 20, as in the previous year, but, during the early part of the following year, intimation was received from the Local Government to the effect that 15 of them would be reduced to their *status quo ante*, with the result that there are now only 5 subsidiary jails in the Province.

The Jails Enquiry Committee visited Burma in January 1920, having previously visited the Andamans. They inspected the Rangoon and Insein Jails and were supplied with much written and some verbal evidence.

Civil Justice.

Courts.

59. The Administration of Civil Justice in Lower Burma is under the control of the Chief Court sitting in Rangoon, and in Upper Burma of the Court of the Judicial Commissioner of Upper Burma, sitting at Mandalay. As noted above in paragraph 47, no Additional Judge of the Chief Court was appointed during the year, and for a short period there were only four Judges instead of five. The Divisional Judge, Tharrawaddy, acted as Additional Divisional Judge, Bassein, throughout the year. The temporary Additional Judge of the District Courts of Hanthawaddy and Insein continued to act till March 13th, 1919. The appointment of Additional District Judge, Tavoy, was continued throughout the year, and the Judge of the Subdivisional Court of Ma-ubin continued to act as Additional Judge of the Ma-ubin District Court. On October 1st, 1919, the Judge of the Subdivisional Court of Tharrawaddy and Zigôn was appointed Additional Judge of the Tharrawaddy District Court. A separate Township Judge and Additional Magistrate was appointed for Pyapôn, instead of the peripatetic Judge

who formerly held charge of the Pyapôn and Kyaiklat Townships. The Small Cause Powers of the Township Courts of Dedayè, Kyaiklat and Pyapôn were extended to the whole of the respective townships. The Township Courts of Rathedaung, Ponnagyun, Minbya, Pauktaw, Buthidaung and Maungdaw were invested with Small Cause Court Powers up to Rs. 50 within their respective townships. The Township Courts of Minhla East and Nattalin were invested with similar powers, to be exercised within these two notified areas. In Upper Burma the only change in jurisdiction was that involved by the creation of six subdivisions in the Myitkyina District, as noted above in paragraph 47.

Schemes for the formation of a High Court and for the reorganisation of the Superior Judicial Service in Lower and Upper Burma were submitted to the Government of India soon after the close of the year. The scheme for the reorganisation of Subordinate Civil Courts in both parts of the province was completed towards the end of the year. The main objects of the scheme are the creation of as many whole-time Civil Judges as possible, and the release of Subordinate Judges so far as may be from the work of trying criminal cases, and from certain extraneous executive duties. A marked effect is anticipated on the despatch of civil judicial work.

Suits.

60. The principal feature of the reports on the Administration of Civil Justice for the year 1919 was the general increase of litigation. There was an increase of 11·6 *per cent.* in Lower Burma, and of over 21 *per cent.* in Upper Burma, in the number of suits instituted. The increase was general in both parts of the province under all important heads. The Honourable Judges, however, pointed out that the figures in Lower Burma were still below the low-water mark of 1913, in which year there was a marked and unexpected falling off. In Upper Burma, the volume of litigation practically attained to the position which it held before the war. There can be little doubt that a return of prosperity, especially amongst the agricultural classes, of which there are other indications, is the principal cause of the increase of litigation. There was a very large increase in suits for immoveable property. Mortgage suits declined in Lower Burma, but increased in Upper Burma. Conditions, however, differ in the two parts of the province, and the decline in the number of these suits in Lower Burma and the increase in Upper Burma were both probably due to the same cause, an increase of prosperity amongst the agricultural population, enabling debtors in Lower Burma to pay off their mortgage debts, and stimulating in Upper Burma the institution of suits for the redemption of ancient mortgages.

In Lower Burma the total number of suits instituted increased from 38,252 to 42,684. The number of institutions in the Chief Court increased by 188, representing rent and ejectment suits filed by

landlords with a view to forestalling the Rangoon Rent Act. The Rangoon Small Cause Court showed a negligible increase, occurring entirely among suits for sums below Rs. 500. Elsewhere the increase was confined to Township and Small Cause Courts, the figures for Subdivisional and District Courts remaining practically stationary. Suits for money or moveable property increased from 34,203 to 37,670. All but three districts contributed to the rise. Suits for immoveable property showed a considerable increase, from 1,203 to 2,015, the Pegu District alone recording a rise from 57 to 344. Mortgage suits declined from 1,560 to 1,303, the fall occurring alike in District, Subdivisional and Township Courts. As remarked above, this may be taken as a symptom of prosperity. Increases are recorded in suits of all other descriptions, of which suits for specific relief and matrimonial suits showed the largest variations from the figures of 1918.

The value of suits filed in Lower Burma increased by Rs. 30·73 *lakhs* to Rs. 1,85·52 *lakhs*, a rise which is out of proportion to the increase in the number of suits filed. In Township and Small Cause Courts, where the increase of suits was most marked, their value enhanced by less than 3 *lakhs* of rupees, while District Courts, where the number of suits remained practically the same, showed a rise in value of five *lakhs* and a quarter. The increase of 23 *lakhs* in the Chief Court is accounted for by an administration suit valued at 27 *lakhs*.

The number of suits disposed of rose from 38,507 to 43,536, disposals exceeding institutions by some 850 cases. Of the suits disposed of 26·24 *per cent.* as against 23·65 *per cent.* were contested. This percentage, which had dropped during the years of war, regained the figure of 1914, and it would appear that during the war only uncontestable cases, so far as possible, were brought into Court. The plaintiffs' percentage of success in contested suits rose from 64·98 to 68·34. The percentage of suits decreed on confession declined from 21·84 to 19·18, and that of cases decreed *ex-parte* from 26·42 to 23·81. Pending suits declined from 5,332 to 5,185, of which 2,235 had been pending for over three months, as against 2,313 at the end of 1918. The improvement was shared by all classes of courts outside Rangoon, but was particularly noticeable in District Courts, where the pending file decreased by 106, and the number of suits pending more than three months by 80. There was a slight increase in the pending file of the Rangoon Small Cause Court, and an increase of nearly 50 *per cent.* in that of the Chief Court.

The duration of contested suits decreased from 87 to 84 days, while the duration of uncontested suits increased from 49 days to 52. These figures are considered unsatisfactory. The general average duration depends largely on the work of the Township Courts, where the great bulk of the cases are tried, and it is believed that there is considerable room for improvement in these Courts, whose cases are, with few

exceptions, of a simple and straightforward nature. The most marked improvement in the matter of duration was shown by the districts of Kyaukpyu, Sandoway, Pegu and Toungoo. The districts with the worst duration were Pyapôn, Amherst, Ma-ubin, Bassein and Hanthawaddy.

In Upper Burma the number of suits instituted increased by 3,473 to 19,681; the increase was spread over all districts except Bhamo and the Ruby Mines, and was most noticeable in Mandalay, Yamèthin and Magwe. The number of suits for money or moveable property increased from 13,991 to 16,153, which is only four less than the figure for 1917. Suits for immoveable property very nearly doubled themselves, the figures being 710 and 1,305. Mortgage suits advanced from 753 to 1,197, matrimonial suits from 381 to 513, suits for specific relief from 170 to 188, and suits not falling under any specified class from 189 to 310.

The total value of suits filed rose from Rs. 26·21 *lakhs* to Rs. 34·04 *lakhs*. The Mandalay, Magwe, Myingyan, Sagaing and Katha Districts were chiefly responsible for this enhancement of value. The Ruby Mines, Kyauksè and Minbu reported decreases. The number of suits disposed of increased by nearly 3,000 to 19,117, the chief contributors being Myingyan, Mandalay, Sagaing, Shwebo and Yamèthin. The percentage of contested cases rose from 21·74 to 26·19, and the percentage of plaintiffs' success was 64·64 as against 67·49 in the previous year. The number of suits decreed on confession was 4,221, or 22·08 *per cent.*, as compared with 4,270, or 26·36 *per cent.* The number of suits decreed *ex-parte* declined from 2,212, or 13·66 *per cent.*, to 2,172, or 11·36 *per cent.* The number of cases pending at the close of the year rose from 2,393 to 3,010.

There was an increase in the average duration of contested cases from 74 to 89 days, and of uncontested cases from 49 days to 52, which is identical with the figure for uncontested cases in Lower Burma. These averages cannot be considered satisfactory.

The number of miscellaneous cases for disposal in the Courts of Lower Burma declined from 6,223 to 6,109; the decrease in Subdivisional Courts alone was 216. The average duration remained at 55 days, and the number of cases pending at the end of the year fell from 763 to 689. In Upper Burma there were 1,960 miscellaneous cases, as against 1,780 in 1918. Three hundred and sixty-five cases remained pending, as compared with 278, and the average duration increased by 10 days to 81.

In Lower Burma the number of applications for execution before the Courts decreased from 33,691 to 33,313, but the amount realised increased from Rs. 22·83 *lakhs* to Rs. 31·34 *lakhs*. The number of applications pending at the end of the year declined from 4,621 to 4,171. The number of debtors arrested, but released without imprisonment, increased by 47, but the number of debtors actually imprisoned declined by 71. Sales of moveable property fell from 740 to 642, and of

immoveable property from 1,702 to 1,340. The percentage of applications wholly or partially successful of the total disposed of showed a slight decrease from 42·41 to 42·10.

In Upper Burma the number of applications for execution of decrees fell from 11,667 to 11,521, but the number pending at the end of the year increased from 2,144 to 2,375. Realisations amounted to 4·98 *lakhs* of rupees as against Rs. 5·02 *lakhs*. Imprisonments for failure to satisfy decrees declined from 70 to 54, but the number of judgment-debtors arrested, but released without imprisonment, was 655 as against 632 in 1918 The percentage of applications wholly or partially successful of the total disposed of increased from 48·75 to 49·41.

Five hundred and fifty-six applications under the Provincial Insolvency Act were made in Lower Burma, as against 528 in the previous year. Three hundred and eight were made by debtors who had been arrested, 241 by debtors who had not been arrested, and seven by creditors. The number disposed of rose from 536 to 571 ; 23 cases were withdrawn, 207 were dismissed, and adjudication orders were made in the remaining 341 cases, a receiver being appointed in 74 of these. In Upper Burma the number of insolvency petitions before the Courts was 213 as against 239. One hundred and fifty-nine were disposed of, and 54 left pending, as compared with 201 and 38 respectively in 1918. Adjudication orders were made in 97 cases, receivers being appointed in 19. Ten applications were withdrawn, and 52 dismissed.

Appeals.

61. The number of appeals preferred in District Courts in Lower Burma against decrees of Township Courts rose from 1,384 to 1,674, but durations fell from 57 to 49 days. The percentage of confirmations was 61·14 as against 61·81, of modifications 7·32 as against 7·61, of reversals 28·90 as against 26·90, and of remands 2·65 as against 3·67. The number of appeals disposed of was 1,585, as compared with 1,472 in 1918, and the number of pending cases rose from 159 to 248. It was again remarked that too little use is still made of the provisions of Order XLI, Rule 11, regarding the summary dismissal of appeals, though the figures show an improvement from 115 to 163 in the cases so disposed of.

The number of appeals preferred against decrees in Divisional Courts increased from 349 to 370. The number disposed of was 371, as against 351, and the average duration fell by one day to 100. The percentage of confirmations declined from 67·60 to 60·11 ; the percentage of modifications rose from 10·28 to 12·94, of reversals from 20·87 to 22·10, and of remands from 1·25 to 4·85.

The number of miscellaneous appeals preferred in District Courts declined from 144 to 137, and in Divisional Courts from 83 to 71.

The average duration of these appeals in District Courts increased from 43 to 47 days and in Divisional Courts from 67 to 82 days.

In Upper Burma the number of appeals preferred in District Courts against decrees was 1,628, as against 1,172 in 1918, but the average duration fell from 88 to 82 days. The number of appeals summarily dismissed fell from 154 to 79, and as in Lower Burma the failure of Judges to make sufficient use of this power was made a subject of adverse comment in the Annual Report. The percentage of confirmations was 59·70, of modifications 7·30, of reversals 29·98, and of remands 3·02, the figures for last year being respectively 63·46, 6·71, 25·80 and 4·04. Eighteen appeals from decrees were preferred in Divisional Courts, as against 11. Of the 23 cases before the Courts 15 were disposed of, and the average duration declined from 340 to 172 days. The number of miscellaneous appeals before District and Divisional Courts fell from 167 to 165, of which 37 were pending at the end of the year as against 28. The appellate work of the Chief Court of Lower Burma, and of the Court of the Judicial Commissioner, Upper Burma, is described in the next two paragraphs, which deal with these Courts.

The Chief Court of Lower Burma.

62. During the year of report Judges of the Chief Court sitting singly disposed of 470 original suits, 258 applications for the execution of decrees and 272 miscellaneous cases. On the Appellate Side single Judges dealt with 23 regular first appeals, 207 second appeals, 158 revisions, 26 miscellaneous applications, and one civil reference made by a District Judge under Order XLI, Rules 1 and 7, Code of Civil Procedure. Benches of two Judges dealt with 73 regular first appeals, 13 second appeals, 21 revisions, 48 miscellaneous appeals, 36 miscellaneous applications, and one reference made by the Commissioner, Arakan Division, under section 63 (5), Burma Municipal Act. A full Bench of three Judges dealt with one civil reference under section 11, Lower Burma Courts Act, and one civil reference under section 17 of the Indian Divorce Act. A full Bench of four Judges dealt with two civil references under section 11, Lower Burma Courts Act.

The number of suits instituted during the year was 588, as against 400, while the aggregate value increased from Rs. 46·65 *lakhs* to Rs. 69·82 *lakhs*. With the exception of two short periods during the rains two Judges sat on the Original Side throughout the year, and the number of suits disposed of increased from 417 to 470. Of these 35·32 *per cent.* were contested, as against 25·97 *per cent.* in 1918. The average duration of contested cases rose from 258 days to 295, and that of uncontested cases remained at 219. The number of sales of immoveable property fell from 22 to 14, and of moveable property rose from 3 to 6. The number of cases disposed of under the Presidency Towns Insolvency Act declined from 196 to 164, and the number pending at

the end of the year from 120 to 99. Ten persons were adjudicated insolvents on the application of creditors, and 161 persons on their own application. Debtors were granted their discharge in 76 cases, and in 81 cases the application for discharge was dismissed, or the adjudication order was annulled. The miscellaneous business consisted of 36 applications for probate, 131 applications for letters of administration, 27 cases under the Guardians and Wards Act, 11 applications under the Code of Civil Procedure, and 58 applications under other Acts.

The number of regular appeals instituted rose from 334 to 376, while the number disposed of fell from 474 to 316, with the result that the number pending at the end of the year rose from 220 to 280. Of the appeals instituted 128 were against original and 248 against appellate, decrees as compared with 100 and 234 in 1918. The average duration of first appeals increased from 340 days to 352, but that of second appeals declined from 222 to 189. The large decrease in the work of the appellate side during the year was due to the fact that only one Judge was sitting as a single Judge on the Appellate Side. The reduction to three in the number of ppellate Side Judges had to be made so that two Judges could sit on the Original Side in order to cope with the large increase of original suits instituted. There were 97 miscellaneous appeals for disposal, as against 79 : 48 were disposed of, with an average duration of 143 days, as against 56, with an average duration of 191 days. The decrees of Lower Courts and of the Original Side were confirmed in 72·15 *per cent.*, reversed in 18·36 *per cent.*, modified in 7·59 *per cent.*, and remanded in 1·9 *per cent.* : the proportion of confirmations was higher, and that of reversals lower, than in 1918. Of the total number of appeals dealt with, 24·72 *per cent.*, as against 15·75 *per cent.*, were summarily dismissed. The number of revisions disposed of fell from 194 to 179, the percentage of confirmations rising from 81·96 to 89·94. There were 15 appeals before the Privy Council for disposal, of which five were decided.

The Court of the Judicial Commissioner, Upper Burma.

63. The number of appeals preferred in the Court of the Judicial Commissioner rose from 337 to 475. One hundred and twenty of these were from original, and 355 from appellate, decrees. Disposals increased from 384 to 417, and the number pending at the end of the year from 196 to 254. The Additional Judge disposed of 47 *per cent.* as against 39·58 *per cent.*, the difference being due to an alteration in the distribution of work. The average duration of first appeals declined from 276 to 183 days, and that of second appeals from 157 to 139. The percentage of confirmations rose from 62·50 to 71·70. The number of applications in revision fell from 348 to 332, of which 251 were disposed of. The percentage of confirmations rose slightly to 80·48. The Court also disposed of 59 miscellaneous appeals and applications, as against 85 in 1918.

64. The number of inspections of Courts was, on the whole, adequate in Lower, and inadequate in Upper, Burma. In Lower Burma two advocates of the Chief Court, one first grade pleader, 5 second grade pleaders, and 6 third grade pleaders were admitted, and the certificates of 20 first grade, 122 second grade and 407 third grade pleaders were renewed during the year. In Upper Burma the number of advocates' cases dealt with rose by 2 to 112. There were two complaints of professional misconduct, 16 renewals of licenses and 46 admissions or promotions. Court-house accommodation in Lower Burma was still hopelessly inadequate; in Upper Burma its improvement had in several instances attained the stage of being "under consideration."

General.

Registration.

65. The Financial Commissioner who had been Inspector-General of Registration during 1917, 1918 and 1919 was succeeded on the 1st January 1920 by the Excise Commissioner whose report deals with the triennium.

General.

66. The total number of compulsory registrations rose from 57,828 in 1918 (the lowest since 1912) to 78,378 in 1919, while the value rose from Rs. 8,29,81,710 to the record figure of Rs. 11,42,58,772, an increase of over 37½ *per cent.* Instruments of gift declined in value, though not in number; all other classes increased. Instruments of sale over Rs. 100 rose from 25,115 to 36,088 by Rs. 2,14½ *lakhs* in value, of which Rangoon Town produced Rs. 1,03 *lakhs*, Mandalay Rs. 38 *lakhs*, Tharrawaddy Rs. 20 *lakhs* and Hanthawaddy Rs. 13½ *lakhs*. This sharp rise in 1918 following on two years of decline is ascribed to the impetus given by the declaration of peace. The Rangoon Town figures (3,000 instruments and Rs. 3,44 *lakhs* value) are easily a record, due to investment in real estate of money that would have been put into stocks had supplies been easily procurable. While the figures for the year have been swollen by exceptional causes, a steady increase in the number of transactions registered is evident. Mandalay figures indicate the investment of large accumulations of capital during the war now set free for agricultural and commercial enterprise.

Deeds Registered.

Instruments of mortgage rose from 29,131 to 37,589 and from Rs. 2,75 *lakhs* in value to Rs. 3,53 *lakhs*. The year witnessed a recovery of confidence on the part of lenders due to the high price of paddy, and the Upper Burma share of the increase may be accounted for by the increasing value of land in most districts.

Optional registrations relating to immovable property (which are regarded as indicating the state of the money market) rose from 156 to

184, and in value from Rs. 4·34 *lakhs* to Rs. 5·18 *lakhs*. Registration of instruments affecting moveable property rose from 7,964 to 8,971, but fell from Rs. 85 lakhs to Rs. 62 *lakhs* in value. Sales of standing crops are reported in Thatôn and Myingyan.

Gifts appear to be used in some districts to obviate inheritance quarrels consequent on the lack of testamentary powers. There is a small, but steady, growth in the deposit of wills and written authorities of adoption.

Income and Expenditure.

67. The income in 1919, Rs. 2,82,953, was higher than in any previous year, and exceeded that in 1918 by Rs. 74,000. Expenditure rose only from Rs. 1,13,882 to Rs. 1,18,756. The number of special sub-registrars was unchanged at 43. The importance of a uniform procedure for registration work and of the safety of records has been impressed on all registration officials.

Joint Stock Companies.

68. At the close of the year one hundred and thirty-eight companies with an aggregate authorised capital of Rs. 32,79 *lakhs* were working as compared with 126 and Rs. 11,58 *lakhs* in the previous year. During the year 16 new companies with capital of Rs. 21,05 *lakhs* were registered as against 15 and Rs. 1,45 *lakhs*. Twenty-two companies increased their capital by an aggregate of Rs. 63,10,000. Three companies reduced their capital by Rs. 4,15,000 and four (with aggregate authorised capital of Rs. 46 *lakhs*) ceased to work. The heavy increase is due to a general extension of local enterprise, mining and insurance being the outstanding feature. The Burma Corporation Limited, with capital of Rs. 18,00 *lakhs*, is a local registration of a British Company, for which British taxation is doubtless responsible. One Company established outside British India stopped carrrying on business in Burma during the year. The associations not for profit rose by one to twelve, making a total of 150 registered companies. There were two Provident Insurance Societies on the list and one Society was registered under Act XXI of 1860 bringing the total so registered to 48. Fees received amounted to Rs. 9,926-10-0 and cost of establishment sanctioned for disposal of Joint Stock Company work to Rs. 923.

The new companies registered were one insurance, seven trading, two planting and six mining. The total of 138 is made up of 8 insurance, 60 trading, 16 mills and presses, 12 planting, 32 mining, and 10 land and buildings. Of these 2 insurance, 16 trading, 5 mills and presses, 6 planting, 11 mining and 2 land and buildings (42 in all) are private companies.

Local Boards Administration.

69. There are at present no local boards in Burma, but during the year some progress was made with plans for their institution, as they

form an integral part of the proposed scheme of constitutional reform for the province. At present the District Funds in Upper Burma and the District Cess Funds in Lower Burma are administered by the Deputy Commissioners of the districts to which they belong. Some account of their receipts and expenditure is given in Chapter V of this Report.

Municipal Administration.

Rangoon Municipality.

70. Bye-elections were announced in June and August to fill vacancies in the Hindu and European Communities, respectively, of the Rangoon Municipality. In each case there was only one candidate, who was duly declared elected to the seat. The ordinary income of the Municipality rose from 48·92 *lakhs* of rupees to Rs. 54·86 *lakhs*. The figures are swollen by a grant of some Rs. 3½ *lakhs* from Government, but there was a substantial increase of nearly Rs. 2½ *lakhs* in the normal revenue, which was spread over nearly all the heads of account. The incidence of taxation, and income per head of population rose from Rs. 12-2-1 to Rs. 12-9-3 and from Rs. 17-2-4 to Rs. 19-4-1 respectively. No new tax was proposed or sanctioned during the year, and no pronouncement was made by the Local Government with regard to the proposal, referred to in last year's report, to introduce a terminal tax on certain classes of commodities. During the year 645 new properties, including one foundry, were assessed to taxation, and the assessment of 576 properties, including 6 mills and one workshop, was revised. The number of properties separately assessed to taxation rose from 16,794 to 16,813. The total monthly assessed value of all buildings and lands within the Municipality, other than Government, Port Trust and Railway properties, showed a slight increase from Rs. 12·05 *lakhs* to Rs. 12·39 *lakhs* and the gross demand for Municipal taxes thereon from Rs. 29·80 *lakhs* to Rs. 30·54 *lakhs* The contribution received from Government on account of Municipal taxes on Government buildings and lands was Rs. 2·28 *lakhs* as against Rs. 2·24 *lakhs*. The arrangement whereby Government paid a yearly contribution in lieu of Municipal taxes, calculated at the rate of 7½ *per cent.* on the total sum derived annually as taxes from private lands and buildings, expired on March 31st, 1920. In lieu of the imminent consideration in the Legislative Council of the City of Rangoon Municipal Bill, it was considered unnecessary to elaborate any alteration from the previously existing system. The amount received from the Port Trust, calculated on the basis of 4 *per cent.* of its ordinary revenue, increased from Rs. 1·38 *lakhs* to Rs. 1·66 *lakhs*. The assessed demand for Municipal taxes on Railway property, was Rs. 1·30 *lakhs*, which differs little from last year's figure. The revenue derived from Municipal rates and taxes increased by nearly

Rs. 1·29 *lakhs* to Rs. 35·85 *lakhs*, due to the revision of assessments in certain areas, and to the fact that there were fewer vacant houses, and so less remissions. Under other heads of income there were large increases of Rs. 38,542 in receipts from Markets and Slaughter-houses, Rs. 22,573 in Rents of Lands and Houses, Rs. 12,980 in Conservancy receipts other than Rates and Taxes, and Rs. 11,078 in Hackney Carriage receipts. The ordinary expenditure increased from Rs. 43·23 *lakhs* to Rs. 47·90 *lakhs*. Water-supply, Conservancy and Roads account for the largest increases under individual heads: there was, moreover, a general rise in cost of materials and labour, and it was found necessary to grant compensation to Municipal employees for the higher cost of living. The Municipal fund had at the end of the year a balance of Rs. 7·99 *lakhs* as against Rs. 2·12 *lakhs*. This large increase is explained in part by the fact that the Government grant of 3½ *lakhs* referred to earlier in this paragraph, was received just before the close of the year.

The fire brigade attended 49 fires, as compared with 53 in 1918. Once more the damage done by fire was extremely heavy, the total loss being estimated at nearly 20 *lakhs* of rupees. One fire alone, involving a rice mill, its machinery and six warehouses stocked with rice and paddy, entailed a loss of 15 *lakhs*. Sight was not lost of the expediency of providing a modern fire escape and fire float, and advantage was taken of the Chief Officer's visit to England on leave, to depute him for a short period to study this question among others. The cost of the upkeep of the brigade advanced from Rs. 71,731 to Rs. 89,082. Extensive repairs to a damaged engine, the purchase of equipment and a revision of the pay of the staff account for this increase. The replacement of carbon filament lamps by metal filament lamps, under the new agreement with the Rangoon Electric Tramway and Supply Company, mentioned in last year's report, was completed in September 1919. Progress was made with the introduction of electric lighting into roads previously illuminated by oil lamps: 58 of the latter were in this way removed, but a few additional lamps were erected in outlying portions of the town. The cost, respectively, of electric and oil lighting during the year was Rs. 2·08 *lakhs* and Rs. 32,853 as against Rs. 1·78 *lakhs* and Rs. 28,894 in the previous year.

There was no interruption of the main water-supply of the town from the Hlawga reservoir. The average daily supply was a little over twelve million gallons, and though this is some two million gallons less than the daily average for the year before, there was still reason to suspect a wastage of between 1½ and 2 million gallons a day. The Committee were faced with the problem of finding new sources of supply, and once more turned their attention to the Kokkaing Lake. Orders were given for a preparation of estimates of the cost of purifying this water so as to render it reasonably safe for domestic purposes.

The tube well at Alôn continued to supply water to public hydrants for drinking purposes. Through the courtesy of the Irrawaddy Flotilla Company, water brought over to Dalla in the Municipal water boats was pumped into the Company's tanks, and thence distributed to the inhabitants. The debit balance of the water-tax fund increased from Rs. 37·11 *lakhs* to Rs. 37·62 *lakhs*.

In the sewerage area the system was maintained efficiently, but no extension was undertaken. A few more bursts occurred on the 21-inch sealed sewer in Merchant Street, and the work of renewing it was put in hand. Outside the sewered area a dispute occurred between the Municipality and the Burma Railways Company as occupiers of a plot of land near a night-soil depôt which was alleged to be causing a nuisance to the employees of the Company residing on the plot. A suit was instituted and an injunction obtained against the Municipality. This was upheld on appeal, the Court holding that the Municipal Act does not authorise the Committee to commit a nuisance in the exercise of its powers. As a result of this decision the law has been amended, and the Rangoon Municipal Sewage Act, 1920, expressly grants the Municipality power to commit a statutory nuisance, while providing that the rights of any persons injuriously affected by the nuisance are safeguarded. The work of altering and renewing the connexions and manholes in the sewers laid in certain back drainage spaces, preparatory to paving the latter, was completed in two more blocks, and the drainage spaces in two more blocks were paved in the course of the year.

Negotiations for the transfer of the Strand Municipal Market to the Port Commissioners were revived. The purchase price will be devoted by the Committee to the acquisition of land elsewhere, and the construction of a new market. Bazaar receipts increased from Rs. 2·75 *lakhs* to Rs. 2·95 *lakhs*. The new Yegyaw Market continued to be popular, and the revival of trade refilled many stalls in other bazaars which had for years been vacant. Fifty samples of ghee were taken for examination under the Ghee Adulteration Act, and twenty-nine prosecutions instituted of which all but two were succesful. Greater activity was displayed in the checking of weights and measures.

Excluding pigs, the number of animals slaughtered for food rose from 102,237 to 121,957, while the revenue derived from slaughtering and lairage fees increased from Rs. 1 40 *lakhs* to Rs. 1·54 *lakhs*. The increase is due in part to the greater vigilance of the illicit Slaughter Inspector and his staff, and to the diversion to the market at the slaughter-house of a large number of animals from the race course common, whence they were formerly disposed of for illicit slaughter. The number of pigs slaughtered rose from 22,708 to 27,198, and the revenue obtained from this source was Rs. 31,157 as against Rs. 27,621. The number of animals that passed through the cattle-market rose from 74,980 to

151,895, the largest increase occurring under the head of goats, for which additional accommodation had to be provided. The revenue increased from Rs. 13,333 to Rs. 15,656. The number of animals impounded increased from 10,427 to 12,207. Ten cases of glanders, three of surra, eight of anthrax and 302 of cattle plague were discovered. On the whole, the year was healthier for animals than its predecessor.

No new roads were constructed, and the shortage of engineering staff and plant, coupled with difficulties in the matter of labour and transport, made it impossible to expend the whole $3\frac{1}{4}$ *lakhs* allotted to roads in the budget. A portion of Lower Pazundaung Road, which had been destroyed by the heavy timber traffic of the Munitions Board, was renewed to its foundations, a portion of the cost being recovered from the Board. The asphalte roads, paved within the last few years, proved extremely expensive to maintain, and no fresh roads were treated with this substance, or paved with granite setts. The programme proposed for tarring roads was considerably curtailed owing to inability to obtain sufficient supplies of tar. A sum of Rs. 31,600 was spent on this object, and Rs. 2·49 *lakhs* on other resurfacing and patch repairs. The total expenditure on footpaths was Rs. 33,577. The cost of street watering rose from Rs. 63,400 to Rs. 65,807.

Applications for the erection or re-erection of buildings increased from 992 to 1,145, while the number of prosecutions for infringement of the building bye-laws fell from 1,117 to 1,090. Of the new buildings erected, 249 were built of masonry, 380 of plank, and 340 of mat. The public parks and gardens were kept in good order, and the cutting and trimming of road side trees was continued.

Excluding the loans aggregating Rs. 60·50 *lakhs* raised by the Municipal Committee on behalf of the Rangoon Town Lands Reclamation Fund, the indebtedness of the Committee at the end of the year of report fell from Rs. 1,30·58 *lakhs* to Rs. 1 30 *lakhs*. The face value of the securities in the Sinking Fund on March 31st, 1920, was Rs. 45·11 *lakhs* as against Rs. 40·53 *lakhs*. With the exception of a small payment to the Reclamation Fund for work already carried out, no advances were made from revenue during the year to meet the cost of capital works. No new loan was raised, but pending the decision of Government on a proposal to float a Premium Bond loan, the Committee took an overdraft of ten *lakhs* of rupees from the Bank of Bengal to start certain urgent works, which must ultimately be financed from loan money. The Provident and Fire Insurance Funds were in a sound financial condition, and on the day when their accounts were closed held respectively Rs. 7·99 *lakhs* and Rs. 6·71 *lakhs* in Municipal, Port Trust and Government paper.

Amendments were made in the bye-laws and rules regulating the conduct of business, registered buildings, permits for sun-blinds and the construction of buildings. The Rangoon Tramways Order was also

amended. The City of Rangoon Municipal Bill was introduced in the Burma Legislative Council on January 2nd, 1920.

The number of taxi-cabs increased from 58 to 111, and the receipts from this source from Rs. 3,500 to Rs. 6,867. Bullock-cart licenses increased from 1,686 to 1,958, and hand-cart licenses from 1,343 to 1,646. The license fees amounted to Rs. 63,234, as against Rs 52,265.

The population of Rangoon according to the census of 1911 was 293,316 and in mid-year 1919 was estimated to be 327,273. As compared with 1918 the number of births fell from 6,220 to 6,103 and the birth-rate per thousand of the estimated population from 19·31 to 18·71. The number of deaths increased from 15,411 to 15,554, giving a death-rate for the year 1919 of 47·68 per thousand of the estimated population, that is, practically the same as the previous year. The number of infants who died before completing their first year of life was 2,165, giving an infantile mortality rate of 354·74 as compared with 2,048 deaths and a mortality rate of 329 26 in the previous year The Health Officer attributes the regrettable increase in the infantile mortality rate to, firstly the influenza epidemic and, secondly, the increased cost of living. The rate was highest amongst Hindus and lowest among Europeans and Anglo-Indians The number of cases of plague fell from 1,776 to 841 and the number of deaths from 1,668 to 782. The age period most affected was that between 20 and 30, and H ndus suffered the most. The number of cases reported as cholera (it is believed that a proportion of these cases were not cholera but acute influenza) increased from 99 to 278. An outbre k of small-pox of some severity occurred in the early months of the year; the epidemic was at its height in March and then gradually fell off until June, when it was practically over. Altogether 1,590 cases were reported, of which 241 were found to be imported, and 656 died. Influenza was epidemic throughout the year and was responsible for just over 20 *per cent.* of the total mortality in Rangoon, the number of deaths from this cause reported being 3,336. The two special Influenza hospitals, which were opened in September-October 1918, were closed when the epidemic relatively ceased, and the free supply of medicines, which was undertaken from various Municipal depôts, was stopped at the beginning of January 1919. The number of deaths from enteric fever fell from 23 to 15, and deaths from malaria from 392 to 261. Diarrhœa and dysentery accounted for 1,271 deaths as against 1,067, and tuberculosis for 921 as against 780. The mortality from Beri-beri declined slightly from 119 to 113, and 13 deaths were reported from cerebro-spinal meningitis as against five. The total number of vaccinations performed fell from 50,050 to 48,219, of these 16,290 were primary vaccinations with a percentage of success of 99·87, and 31,929 were re-vaccinations, of which 60·40 *per cent.* were successful.

Minor Municipalities.

71. The number of municipalities, which was 44 in the previous year, was raised to 46 by the conversion of the Notified Areas of Zigôn and Nyaunglebin to the status of municipalities with effect from the 1st January 1920. There was no alteration in the boundaries of any of the municipalities.

In the constitution of the new municipalities of Zigôn and Nyaunglebin the electoral system was introduced with a substantial majority of elected members. The constitution of the other Municipal Committees remained practically the same as in the previous year. The office of the Vice-President in several municipalities was held by non-official members, and there were non-official Presidents at Insein, Zigôn, Kyaukpyu, Syriam, Nyaunglebin and Moulmein, the committees of the first two municipalities now consisting of purely non-official members. The numbers of official and non-official members were 192 and 397 as compared with 192 and 371 respectively, in the previous year. Out of 916 meetings held during the year, 6 proved abortive for want of quorum as in the previous year. Pending the introduction of a considered measure of municipal self-government, the Lieutenant-Governor extended during the year the term of office of the members of all municipal committees up to a date not later than the 31st December 1920, as it was hoped that the revised constitutions would be introduced before that date. To obviate the postponement of the introduction of the scheme till specific legislation towards this end is undertaken proposals are now under consideration for the modification of the constitution of Municipal and Town Committees with the object of providing for the introduction of as large a measure of election as may be possible under the existing law.

Expenditure on "Public Safety" rose from Rs. 3·05 *lakhs* to Rs. 3·43 *lakhs*. While in the previous year most of the municipalities enjoyed immunity from fire, serious fires broke out at Paungdè, Allanmyo and Salin. The fire at the first-mentioned place burnt down a rice mill causing a damage of Rs. 3 *lakhs*, and 14 houses. There was a big fire in Messrs. Jamal's Cotton and Produce Company's Ginning Factory in Allanmyo, which destroyed about Rs. 3 *lakhs* worth of property. A disastrous fire broke out in Salin in Upper Burma, which destroyed nearly 600 houses, causing the loss of 6 lives and of property worth about Rs. 3 *lakhs*, and rendered thousands of people homeless. A Fire Relief Committee was formed, which afforded help to the sufferers. The Mandalay Fire Brigade attended 33 fires, which destroyed 102 houses valued approximately at Rs. 32,000. There were also 4 fires at Akyab, which destroyed 5 houses valued at Rs. 6,250, and 2 at Prome, where 133 houses, mostly mat huts, were destroyed, and one at Kyaiklat causing damage to the extent of Rs. 20,000. The Moulmein Fire Brigade attended 10 fires against 11 in the previous year. Out of the total expenditure of Rs. 3·43 *lakhs* a sum of Rs. 3·03 *lakhs* was spent on lighting and

Rs. 40,055 under the head "Fire (Establishment, purchase of fire engines, buckets, repairs, etc.)"

Capital outlay on water-works was incurred during the year only in 5 municipalities, *viz.*, Pegu (Rs. 50,000), Mandalay (Rs. 49,726), Ma-ubin (Rs. 12,148), Mônywa (Rs. 2,603) and Prome (Rs. 1,675). Charges on account of establishment, repairs, etc., in connection with water-supply rose slightly from Rs. 1,17,594, to Rs. 1,27,106.

No capital expenditure was incurred in connection with drainage works, except at Prome and Mandalay, where the sums spent amounted to Rs. 1,774 and Rs. 5,402 only respectively. Charges on account of establishment, repairs, etc., amounted to Rs. 20,294 as compared with Rs. 30,555 in the previous year. The total expenditure on conservancy rose from Rs. 8·40 *lakhs* to Rs. 9 *lakhs*. Owing to the abnormal conditions produced by the war, such as the high cost of materials and the difficulty of obtaining them, many important schemes, in hand or under consideration, for the improvement of water-supply, drainage and conservancy, have had to be held up till conditions become more favourable.

Expenditure under "Hospitals and Dispensaries" rose from Rs. 6·78 *lakhs* to Rs. 7·44 *lakhs*. The construction of new wards in the Syriam Hospital, the extension of Burmese Nurses' quarters at Mandalay and the inclusion of Zigôn and Nyaunglebin in the list of municipalities contributed chiefly towards this increase.

Expenditure on education rose from Rs. 2,73,663 to Rs. 3,04,892, showing an increase of Rs. 31,229, nearly two-thirds of which were contributed by the municipalities in Lower Burma and the remainder from those in Upper Burma. The increases are most noticeable in the Pegu and Tenasserim Divisions, where the expenditure amounted to Rs. 43,535 and Rs. 75,944 during the year of report, against Rs. 36,844 and Rs. 63,384 in the previous year. There were also increases in the Magwe, Sagaing and Meiktila Divisions.

The number of notified areas, *i.e.*, areas in which certain provisions only of the Municipal Act are in force, was reduced from 22 in the previous year to 21 by the conversion of Zigôn and Nyaunglebin into municipalities and the constitution of a new notified area at Mawlaik, with effect from the 1st January 1920. There was no alteration of boundaries of any of the notified areas during the year. The total income of these areas, excluding opening balances amounting to Rs. 3·05 *lakhs* and extraordinary receipts amounting to Rs. 0·20 *lakh*, fell from Rs. 9·50 *lakhs* to Rs. 8·44 *lakhs*. The incidence of taxation varied from Rs. 9-14-11 at Maymyo to Re. 0-11-2 at Mawlaik. Pending the reconstitution of the notified area of Myitngè, the collection of taxes in that town was suspended under the orders of the Local Government. The average incidence for all the notified areas rose slightly from Rs. 2-8-9 to Rs. 2-9-4.

A most satisfactory feature of the year was the decrease of death rate reported by 20 municipalities in Lower Burma and 14 in Upper Burma. Four in the Irrawaddy Division and 3 in Tenasserim Division recorded an increase of mortality, while 4 municipalities in Lower Burma and 1 in Upper Burma failed to supply information on this subject. While the high death rate in 1918-19 was due chiefly to the influenza epidemic, which broke out in a virulent form, the decline in the year under report is accounted for by the gradual disappearance of the disease and also by the comparatively reduced incidence of plague, cholera and small-pox. Bassein in Lower Burma and Mandalay in Upper Burma suffered the most from epidemic disease. Among the municipalities in Lower Burma where plague caused the largest number of deaths were Prome (552), Bassein (196) and Henzada (189). The heaviest mortality in Burma was at Mandalay, where a severe epidemic of plague prevailed for about six months and carried away 1,482 persons, while only 260 deaths were due to this disease in the previous year. No deaths from plague appear to have occurred in 15 municipalities in Lower Burma and 4 in Upper Burma. A large number of municipalities in Lower Burma were visited by cholera, which accounted for 190 deaths in Bassein, 122 in Akyab, 108 in Toungoo and 106 in Kyaiklat, while 2 municipalities in Upper Burma suffered the most from this disease, *viz.* Mandalay (154) and Myingyan (70). Serious outbreaks of small-pox occurred only at Mandalay and Bassein, where the deaths were 437 and 363. Deaths were also reported from Myingyan (86), Thayetmyo (58), Pakôkku (45) and Toungoo (36). Twenty-six cases of beri-beri occurred in Akyab against 36 in the previous year. A decrease of infantile mortality was reported from Gyobingauk, Taungdwingyi, Mandalay and Kyauksè.

Among the notified areas, Meiktila and Shwedaung reported 24 and 71 deaths respectively, from plague, the epidemic at the latter place being due to an imported case. Shwedaung also sufferred from cholera (33 deaths) while Minhla and Pyawbwè reported 5 and 2 deaths respectively from cholera. There was an epidemic of small-pox in Mawlamyainggyun and Maymyo which accounted for 19 and 11 deaths respectively. Kyônpyaw and Pyawbwè were also visited by small-pox.

Military.

Strength of the Garrison.

72. The total strength of troops forming the garrison of Burma on 31st March 1920 was 9,459 officers and other ranks, of whom 1,988 were Europeans. In addition there were 4,923 adult members (of whom 1,001 were reservists) and 187 cadets belonging to the Indian Defence Force, of which six units are under the Burma Command, *viz.* the 3rd (Rangoon Group) Garrison Artillery, 14th (Tenasserim), 18th (Rangoon), 21st (Burma Railways) and 34th (Upper

Burma) Battalions and the 28th (South Andamans) Company. The capitation grant earned in the year ending 31st March 1920 was Rs. 1,70,467-12-0, and "other grants" Rs. 24,967-7-0.

Marine.

Light-houses and Light-ships.

73. As in the preceding year, the light-ships "Danidaw" stationed at the Baragua Flats and "Kalagauk" at the Krishna Shoal were towed in turn into Rangoon by the R.I.M.S. "Mayo" for the annual overhaul and repairs, the relief light-vessel "Martaban" taking their places during their stay in Rangoon. The R.I.M.S. "Mayo" continued to be the station-vessel also during the year of report. She was kept fully employed and made 17 visits to the lights, conveying provisions, stores and reliefs. Besides these visits, she also conveyed provisions, stores and reliefs on her way to Calcutta for her annual overhaul and repairs on the 7th August 1919. In addition to her station duties, she was also utilised on two occasions in bringing paddlers from Colombo, that had returned from Mesopotamia. Her services were also requisitioned in bringing Government launches from Akyab, Moulmein and Tavoy to Rangoon for their annual overhaul and repairs, and in escorting them back to their respective stations after the repairs had been carried out. While she was returning to Rangoon with the steam-launch "Builder" after visiting Green, Double and Reef Island lights, she collided with the "Arankola" in the Rangoon River and sank. One death occurred during the year on the F.L.V. "Danidaw" stationed at Baragua Flats. Mr. W. R. Medlock, Mate in charge, was taken ill, brought to Rangoon and sent to the General Hospital where he died. On the F.L.V. "Kemmendine" at Spit Station, there were many cases of pulmonary complaints, but none succumbed. At other light-houses the health of the light-keepers as well as of the crew of the light-vessels, was good. The total expenditure on light-houses and light-ships rose from Rs. 2·61 *lakhs* to Rs. 3·24 *lakhs*; the expenditure on repairs to light-houses by the Public Works Department rose by Rs. 31,587, that on oil went up from Rs. 260 to Rs. 24,876, that on provisions from Rs. 36,695 to Rs. 38,554, that on houses and other allowances from Rs. 894 to Rs. 6,266 and that on blue light composition from Rs. 45 to Rs. 8,622. The expenditure on establishment fell from Rs. 62,590 to Rs. 59,717, and that on stores and contingencies, from Rs. 44,089 to Rs. 40,449. The receipts from coast-light dues rose from Rs. 3·44 *lakhs* to Rs. 4·88 *lakhs*, during the year of report. These amounts do not include the annual contribution of Rs. 4,200 paid by the Port Commissioners, Rangoon, towards the Spit light-vessel. The annual *pro forma* account of the Burma coast-light dues showed a loss of Rs. 41,603 on the year's working as compared with the loss of Rs. 1,59,546 on that of the last year.

Port Administration, Rangoon.

74. The revenue account of the Port Commissioners closed at the end of the year with a surplus of Rs. 4·59 *lakhs*, as compared with Rs. 6·96 *lakhs* at the close of the previous year. Receipts amounted to Rs. 52·30 *lakhs*, which differs very slightly from last year's figure, but expenditure rose from Rs. 45·30 *lakhs* to Rs. 47·70 *lakhs*. The rise is attributed to enhanced taxation, increased labour charges, and the general upward tendency of prices. No new works were undertaken during the year, and no loans were raised. The total loan indebtedness remained at the figure of the last two years, Rs. 2,98·62 *lakhs*, but the securities at the credit of the different sinking funds amounted to to Rs. 74·30 *lakhs*, as against Rs. 65·49 *lakhs*. During the year Rs. 75,000 was added to the revenue reserve fund, a similar amount to the fire and marine insurance fund, and Rs. 1·25 *lakhs* to the depreciation and replacement fund. The total amount at the credit of the various reserve funds now stands at Rs. 47·80 *lakhs* as against Rs. 43·35 *lakhs*.

The Customs returns showed that 86·07 *per cent.* of the foreign and coasting trade of the Province passed through Rangoon: of the imports 59·8 *per cent.* were landed on, and of the exports 19·7 *per cent.* were shipped from, the premises of the Port Commissioners, and the rest passed through private premises or were discharged into, or landed from, inland vessels. The corresponding figures for the previous year were, respectively, 87·07, 60·7 and 18·2. The inland (river borne) trade which passed over the premises of the Commissioners rose from 750,895 to 823,821 tons. The revenue of the traffic department fell from Rs. 28·03 *lakhs* to Rs. 27·51 *lakhs*. That of the port department, on the other hand, rose from Rs. 8·45 *lakhs* to Rs. 9·12 *lakhs*. Revenue from river dues declined from Rs. 15·34 *lakhs* to Rs. 14·94 *lakhs*. The number of berths available for sea-going vessels was 10, and in one only case was it impossible to berth a ship immediately on arrival. There was a substantial increase, from 363,017 to 419,945 tons, in the volume of cargo landed on the Commissioners' wharves and pontoons, directly or by lighters. The tonnage of goods landed from vessels arriving from European and other ports outside Asia increased by 1·39 *per cent.* while that from Asiatic ports declined by 2 *per cent.* The cargo shipped direct into sea-going vessels declined from 144,321 to 81,106 tons, the decrease being due to a falling off of exports of timber by Government. The number of passengers, excluding troops, to or from ports outside Burma, who passed over the wharves and pontoons of the Commissioners, increased from 444,418 in 1918 to 472,099 in 1919. At the close of the year the number of warehouses let or available for letting was 167, with a floor area of 665,881 square feet, compared with 164 warehouses, with a floor area of 640,517 square feet, in the preceding year. Traffic over

the Commissioners' sidings declined by 24 *per cent.* from 427,819 to 324,912 tons.

No new engineering work was undertaken during the year. The usual maintenance and repairs were carried out by a depleted staff. The questions of protecting the river banks below the Hastings, and removing Mowers' Point were discussed at a special meeting in January 1920, which was attended by Sir George Buchanan, some time Chairman of the Port Commissioners. As a result of the deliberations the Commissioners decided to provide for the removal of Mowers' Point in their programme of works, and with regard to the larger scheme of river training below the Hastings Shoal, to await the detailed project which was under preparation by the Consulting Engineers, and their own Chief Engineer.

The number of steamers, excluding Government vessels, which arrived in the port, rose from 1,038 of 1,990,472 net registered tonnage, to 1,054 of 2,249,751 tons. Five hundred and one sailing vessels, of 45,402 tons entered the port, as against 482 vessels, with a tonnage of 41,140. Nine hundred and forty-three cargo boats and 5,576 passenger and cargo sampans were licensed during the year, as compared with 964 and 5,608 respectively in the previous year.

The project of providing a dry dock, which had been under discussion for seven years, was at the close of the year definitely included in the works programme. A new rule was published prohibiting the discharge from vessels other than oil tank steamers of contaminated water ballast or bilge water except below a line drawn due west from the old East harbour beacon. Oil tank steamers were similarly required to overflow between the pilot vessel and the Bassein Creek, any water carried in their oil tanks. This rule was rendered necessary by the action of certain vessels which discharged into the harbour sea water contaminated with oil fuel, thereby endangering the shipping in the port. The appointment of Chairman was severed from that of Chief Engineer: hitherto one officer had held the dual post. There were 15 minor casualties, and two serious casualties during the year: the latter were both cases of grounding. The upper river training wall continued to act satisfactorily, and the silting behind the wall made good progress.

Pilot Service, Rangoon.

75. The Rangoon Pilot Fund opened with a credit balance of Rs. 1,598. The receipts during the year of report increased from Rs. 3,69,358 to Rs. 4,41,834 and the expenditure from Rs. 3,57,403 to Rs. 4,53,475, the deficit on the year's working thus amounting to Rs. 11,641. The total cash deficit on the fund at the close of the year was Rs. 40,282 and this is being temporarily financed from the Port Fund. The estimate for the year 1920-21, provides for a sufficient surplus on the

year's working, which will ensure financial stability to the Pilot Fund at the end of that year. No contribution was made to the Pilot Vessels Depreciation Fund during the year. The Pilot Vessel "Guide" was sold during the year for Rs. 15,500 and the amount credited to the fund. The balance at the credit of this fund at the close of the year (including investments at cost) was Rs. 2,49,237; as against Rs. 2,25,142 last year. The gross pilotage fees rose from Rs. 3·65 *lakhs* to Rs. 4·42 *lakhs* and the payments to pilots from Rs. 2·59 *lakhs* to Rs. 2·97 *lakhs*. The pilot service was well maintained during the year. There were 12 delays at the pilot station, due in seven cases to the arrival of vessels before advised date, in three to vessels arriving unadvised, and in two to all pilots being engaged.

Minor ports.

76. Excluding the Rangoon Port Trust, there are six ports in the Province: Akyab, Kyaukpyu, Bassein, Moulmein, Mergui and Tavoy, in which Port Funds are maintained. The total receipts and expenditure of these funds were Rs. 4·88 *lakhs* and Rs. 4·47 *lakhs* as compared with Rs. 4·40 *lakhs* and Rs. 4·18 *lakhs* respectively in the previous year. There was an increase of receipts in all the funds except Bassein and Tavoy and an increase of expenditure in Bassein, Moulmein and Mergui. In Bassein and Moulmein the closing balances were less than in the previous year by Rs. 4,721 and Rs. 2,633 respectively, due to the increase of expenditure over receipts. At the close of the year the Moulmein and Tavoy Port Funds were indebted to Government to the extent of Rs. 38,867 and Rs. 47,413, respectively.

Besides Rangoon, there are Pilot Funds at Akyab, Bassein and Moulmein. These funds derive their income from pilotage fees, and the expenditure consists mainly of cost of maintenance of pilot vessels and payments to pilots. The aggregate receipts of the three Pilot Funds rose from Rs. 0·95 *lakh* to Rs. 1·52 *lakhs*. The expenditure also increased correspondingly from Rs. 0·97 *lakh* to Rs. 1·33 *lakhs*. All the funds closed with balances in excess of the previous year.

Commercial marine: shipping.

77. Repeated voyages are counted in the statistics given in this paragraph and coasting trade means trade with Indian ports, whether British or not. The number of vessels entering ports in Burma increased from 7,160 to 7,503 and their aggregate tonnage from 2,701,928 tons to 3,113,733; the number of vessels clearing from ports in Burma increased from 6,701 to 7,028 and their aggregate tonnage from 2,688,877 tons to 3,150,208. These figures show a further rise in tonnage and conditions are getting to be normal, though the pre-war figures may not be reached for some time yet.

The total number of vessels engaged in foreign trade, which entered the ports of Burma was 583 with an aggregate tonnage of 855,272 tons, as against 799 vessels with an aggregate tonnage of 1,050,574 tons in the previous year. The total clearances were 585 vessels with an aggregate tonnage of 743,390, as against 937 vessels with an aggregate tonnage of 1,213,546 tons in the previous year. Of the former, sailing ships numbered 229, the same as last year, but the aggregate tonnage rose slightly from 24,641 to 25,722 tons; of the latter, sailing ships totalled 268 of 30,561 tons as against 315 of 38,126 tons in the previous year. The number of vessels which entered Rangoon from foreign ports fell from 489 to 349 and their tonnage from 880,387 to 739,482 tons, and the number which cleared fell from 521 to 324 and their tonnage from 1,013,218 tons to 667,989. Of the former, sailing ships numbered 56 of 9,556 tons and of the latter 47 of 6,755 tons. Corresponding figures for the previous year were 47 sailing ships of 7,701 tons and 35 of 7,732 tons respectively.

The number of vessels engaged in coasting trade increased still further in respect of both entrances and clearances. In the year of report 6,920 vessels with an aggregate tonnage of 2,258,461 tons entered, and 6,448 vessels with an aggregate tonnage of 2,406,818 tons cleared, as against 6,361 vessels with an aggregate tonnage of 1,651,354 tons entering, and 5,764 vessels with an aggregate tonnage of 1,475,331 tons clearing, in the previous year. Of the former, sailing ships numbered 5,527 of 199,585 tons and of the latter 5,001 of 188,470 tons. The figures for the previous year were 5,329 of 199,634 tons and 4,783 of 167,519 tons, respectively. Of the vessels engaged in the coasting trade, 777 steamers with an aggregate tonnage of 1,570,044 tons entered Rangoon as against 654 steamers with an aggregate tonnage of 1,232,635 tons in the year 1918-19, and 810 steamers with an aggregate tonnage of 1,691,082 tons cleared as against 607 steamers with an aggregate tonnage of 1,098,025 tons in 1918-19. The number of sailing ships which entered rose slightly from 426 to 441 and their tonnage from 32,172 to 34,896, and of those which cleared rose also slightly from 437 to 447 and their tonnage from 36,005 tons to 38,315.

The number of British vessels entering the ports of Burma from foreign countries in the year of report, increased from 456 to 482, but the number of foreign vessels decreased by 242. The number of vessels under French colours remained the same as last year, namely 7, but their tonnage decreased from 6,174 tons to 3,969. No Chinese vessels entered the ports of Burma during the year, as against 66 vessels of 69,716 tons, last year. The number of Dutch and Greek vessels fell from 24 of 67,638 tons to 2 of 6,269, and from 2 of 3,796 tons to 1 of 2,471, respectively. No Italian vessels entered the ports of the Province in the year of report, as against 8 of 20,363 tons in the

previous year. There was a big fall in Japanese shipping from 151 vessels of 275,421 tons to 49 of 120,954 tons. The number of vessels under the Norwegian flag also fell from 34 vessels of 39,229 tons to 3 of 3,261 tons. Seven vessels of 12,224 tons under American colours entered the ports of the Province as against 15 of 7,817 tons last year.

In the coasting trade the number of vessels which flew British colours increased from 841 to 1,190, and the number of those which flew foreign colours fell from 84 to 62. The number of native craft rose from 4,082 of 126,331 tons to 4,310 of 126,822 tons.

In the foreign trade of Rangoon itself 278 vessels entered under British colours as against 183 and 62 under foreign colours as against 279 in 1918-19. The latter comprised 41 Japanese as against 145, seven each French and American as against 5 each, 2 each Norwegian and Dutch as against 28 and 24, one each Swedish, Greek and Belgian as against one, two and *nil* last year. Two hundred and forty-one vessels cleared under British colours as compared with 183 in the previous year and 64 under foreign colours as against 306. The total number of vessels which entered in the coasting trade of the Province was 6,926 aggregating 2,258,461 tons as against 6,361 vessels representing 1,651,354 tons, and 6,441 vessels with a burthen of 2,406,759 tons cleared as compared with 5,764 vessels of 1,475,331 tons. In the coasting trade of Rangoon 1,135 British vessels (including 382 native craft) and 83 foreign entered as against 947 and 133 respectively in 1918-19. The foreign included 45 Japanese, 13 Russian, 12 Dutch, 6 American, 5 French and 2 Chinese. One thousand one hundred and eighty-one British vessels (including 353 native craft) and 79 foreign cleared as against 943 (including 360 native craft) and 101 respectively. The foreign clearances comprised 42 Japanese, 12 Russian, 11 Dutch, 8 American, 5 French and 1 Norwegian.

In the foreign trade 92 steamers and 1 sailing vessel entered in ballast at Rangoon as against 241 and 24 and 2 steamers cleared in ballast as against 3 in the previous year. In the coasting trade the entries in ballast at Rangoon were 147 steamers and 14 sailing vessels as against 118 and 52 while the clearances in ballast showed 35 steamers and 246 sailing vessels as against 20 and 149 in 1918-19.

Commercial marine: wrecks and casualties.

78. During the year there were 17 accidents, two of which were serious, to sea-going vessels in the port of Rangoon, six less than in the previous year. All the accidents occurred while the vessel was in charge of a pilot or assistant harbour master, and in the two cases in which the accidents were serious it was found necessary to take action against the officers concerned.

Government steamers and launches.

79. The year opened with 166 Government vessels in Upper and Lower Burma excluding the vessels impressed by the Government of India. Four motor launches, a house boat, and two new flats were added to the flotilla during the year and a dredger and a terminal pontoon arrived from Mesopotamia. Three vessels were condemned including a suction pump dredger, the hull of which was converted into a hulk and used as a coal and water depôt for another dredger. At the close of the year there were in Upper and Lower Burma 171 vessels of all descriptions including 88 steam launches, 30 motor launches, 14 house boats and 13 flats, besides two steam launches which continued to be hired by Government. An explosion occurred on the motor launch "Nora" owing to the neglect of the motor driver, but no damage was done. The total earnings of the Local Government vessels fell in the year of report by more than Rs. 1¾ *lakhs* to nearly Rs. 7 *lakhs*, as nearly all the vessels in Upper Burma were taken off duty with the Kuki Punitive Measures, where they were continually employed in carrying men and stores of all kinds from June 1919. The earnings of the Royal Indian Marine Vessels "Bhamo" and "Sladen" during the year fell by more than one-half from Rs. 2·27 *lakhs* to Rs. 1·13 *lakhs*, this large decrease being due to the R.I.M.S. "Sladen" having been taken for examination duties in the Rangoon River in connection with the war, shortly after the signing of the Armistice in 1918. The Police, Telegraph, Customs, Public Works Department, Forests and other boats in the various districts were in good condition and continued to be fully employed. The Public Works Department cutter "Smiler" was swamped and lost at the entrance to the Rangoon River. Three Police country boats and dugouts were condemned, and one sailing cutter and five gigs were purchased with a house and shed at Diamond Island for the pilots of Bassein, on the formation of a Government Pilot Service. The fuelling arrangements carried out by the Forest Department continued to give satisfaction. The value of stores received in the Marine Store Godowns at Mandalay, Bassein and Rangoon was Rs. 1·75 *lakhs* as compared with Rs. 1·05 *lakhs* in the previous year, and the value of the stores issued was Rs. 4·44 *lakhs*, an increase of Rs. 1·28 *lakhs*. The value of the work done at the Marine Workshop, Mandalay, rose from Rs. 57,719 in the previous year to Rs. 68,360 in the year of report. The cost of repairs to vessels and works carried out at the Government Dockyard, Rangoon, amounted to Rs. 4·05 *lakhs*, an increase of Rs. 1·34 *lakhs*. The Government Saw Mill, Mandalay, did not work during the year.

Marine works and surveys.

80. The suction dredger "Cormorant" worked in the Monkey Point channel and in the Danidaw reach as required during the year, dredged 1,370,000 tons of sand and silt and successfully maintained

a depth of not less than 14 feet reduced on the principal tracks. The dredger "Hastings" also dredged 117,250 tons in 120 working days at the various wharves and jetties. Two fixed moorings below the Hastings Shoal were removed and were relaid in a position close to the Syriam foreshore. During the year 46 vessels had owing to insufficient water to complete loading below the Hastings as compared with 30 in the previous year. Four vessels on arrival could not enter the harbour owing to insufficient water and were detained below the Hastings. No changes of moment occurred in the river bed during the year. Complete new surveys of the river bed from Kemmendine to Middle Point (Syriam) including the Pegu river within port limits and of the inner harbour from Hmawun beacon to Elephant Point were completed during the year. The old screw pile jetty at Syriam was dismantled and its replacement by a stronger and more suitable structure is now under consideration. The sea jetty at Andrew Bay was completed and a boulder stone landing stage at Mindat in the Tavoy District was opened.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY.

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

REFERENCES—

Season and Crop Report of Burma for the year ended the 30th June 1920.

Report on the Operations of the Department of Agriculture, Burma, for the year ended the 30th June 1920.

Report on the Civil Veterinary Department (including the Insein Veterinary School), Burma, for the year ended the 31st March 1920.

Report on the Land Revenue Administration of Burma during the year ended the 30th June 1920.

Report on the working of the Co-operative Societies Act in Burma for the year ended the 30th June 1920.

Administration Report of the Public Works Department, Burma (Irrigation), for the year 1919-20.

Agricultural Statistics of India, Volume I.

Area and Yield of certain Principal Crops in India.

Annual Report of the Agri-Horticultural Society of Burma for the year 1919.

Report on the Forest Administration of Burma for the year 1919-20.

Report on the Census of Burma, 1911.

Report on the working of the Indian Factories Act, 1911, in Burma for the year 1919.

Report on the Maritime Trade and Customs Administration of Burma for the official year 1919-20.

Annual Statement of the Sea-borne Trade and Navigation of Burma with Foreign Countries and Indian Ports for the official year 1919-20, Part I, Foreign Trade, and Part II, Coasting Trade.

Review of the Trade of India.

Annual Statement of the Sea-borne Trade and Navigation of British India with the British Empire and Foreign Countries, Volumes I and II.

Annual Statement of the Coasting Trade and Navigation of British India.

Note on the Transfrontier Trade of Burma and the adjoining foreign countries during the year 1919-20.

Administration Report of the Public Works Department, Burma, Buildings and Roads Branch, for the year 1919-20.

Statistical Abstract for British India, Volumes I and II.

Agriculture.

Occupied and Cultivated Areas.

81. The occupied area of the Province increased during the year from 18,738,875 to 18,874,534 acres; the rise amounts to about ·72 *per cent.* The cultivated area increased from 14,571,030 to 14,861,884 acres, while the matured area decreased from 13,473,017 to 13,353,153 acres, and the fallow area from 4,167,845 to 4,012,650 acres.

The area occupied increased in all Lower Burma Districts, except Kyaukpyu, where the decrease was trifling, and Akyab. The large increase in Tharrawaddy is due to the absence of floods, and the reclamation of land under certain hill streams which are being trained by the Forest Department. In Ma-ubin District reclamation is opening new lands under the Yandoon embankment, and cultivation is extending. A large increase in Prome of the area in which crops failed is explained by the deficiency of rain throughout the year.

The favourable promise of the early and middle rains brought large areas under cultivation in the dry zone, and every district in Upper Burma, except Thayetmyo and the Ruby Mines, showed an increase in the occupied area. The apparent general increase is largely due to temporary occupation of inferior lands, which may never be cultivated again. The decrease in the fallow area is particularly marked in the dry zone districts: failures were, however, extensive owing to deficient rainfall.

The twice-cropped area decreased by 93,181 acres, Myingyan, Magwe, Pakôkku and Minbu showing the greatest falling off. The main cause would appear to be a decline in the area under early sessamum. Elsewhere the area twice-cropped was normal, and the Lower Chindwin reported an increase of 10,000 acres.

The crop most largely cultivated was, as usual, rice, which occupied 10,479,844 acres, or nearly 68 *per cent.* of the gross cropped area. There was an increase of nearly 10,000 acres. Sessamum, the next most popular crop, showed a decline of 82,038 acres due partly to unfavourable early rains, and partly to the expansion of groundnut cultivation in certain districts of the dry zone. The cultivation of white beans had been discouraged, and this crop shows a decrease of 200,000 acres, partly met by an increase of nearly 100,000 acres under other varieties of bean. There was a marked expansion in the area under cotton of the short-stapled variety; chillies and tobacco also showed considerable advances.

Area Irrigated.

82. The area irrigated from all sources rose by 31,668 acres to 1,249,158. The area irrigated from Government Canals increased by 25,909 acres to 528,489, the chief contributor being the Shwebo District, owing to the opening of the Ye-u Canal. The area irrigated by the Minbu Canals decreased by 6,737 acres. Except in Sagaing, where abnormal showers fell in June and July, the dry year was generally unfavourable to Tank Irrigation Systems.

The Agricultural Department.

83. Reorganisation proposals have been sanctioned by the Secretary of State including for the new Agricultural College, Mandalay, a teaching and Research staff of 6 members of the Imperial Agricultural Service, 8 of the Provincial and 23 of the

Subordinate. The demonstration side will eventually have 11 members of the Imperial Agricultural Service, 11 of the Provincial and 165 of the Subordinate. The Secretary of State is taking steps to recruit a Professor of Agriculture, a Professor of Mycology and four Deputy Directors. Terms likely to attract suitable recruits will be offered for the Provincial and Subordinate Services. During the year under review, the strength of the staff was affected by leave vacancies (involving duplication of charges), resignations, while two appointees were not able to join the Department. The Economic Botanist arrived in Burma but the Assistant Botanist resigned: steps were taken to recruit an adequate staff to assist the Economic Botanist. The plans of the Agricultural College, Mandalay, were settled and work was begun on the buildings which will be, it is hoped, thoroughly well equipped by modern standards.

The three assistants at Poona took the Bachelor of Agriculture degree of Bombay University, one heading the list of successful candidates, and they have been appointed to posts in the Province. An offer has been made to a private student at Poona from Burma to fill the place of the fourth man who died. The student from Hsipaw State is now in his second year, and another Burma student is in his final year. Poona agreed to take 14 Burma students assisted by Government stipends to study there until the Provincial College is completed, and the services of these students will be available for the Department for a term of years. Three Anglo-Indian youths were appointed as probationers for training at the Mandalay farm. Four Kachin students completed a year's training at Hopin, of whom two have become Demonstrators under the Assistant Superintendent, Htawgaw. There were four youths in training at Yawnghwe who will return to their States to act as Demonstrators. Two Shan Chiefs visited the Yawnghwe farm and were given notes on farming operations.

Agreement was reached on the form that Government assistance will take to the State-aided Vernacular Agricultural School at Pyinmana promoted by the American Baptist Mission, which was formally approved. A proposal to start an Agricultural School at Twante for the education of Anglo-Indian boys was submitted by the Brothers of St. Paul's Roman Catholic Mission, Rangoon, and was discussed during the year. The training of district agriculturists will cease, those at present employed being, where suitable, incorporated in the Subordinate Agricultural Service.

The expenditure of the Department fell from Rs. 3·58 lakhs to Rs. 3·11, of which Rs. 14,362 represented contributions to botanical and other gardens. Receipts rose from Rs. 13,472 to Rs. 31,203. The value of implements sold through the Department increased from Rs. 1,274 to Rs. 36,724.

Agricultural Research.

84. The Hsumhsai station, the Sahmaw and Natywagôn sub-stations and the Bugyi experimental plot were closed; a new farm at Mahlaing, chiefly for cotton experiments, was sanctioned, and 248 acres of land were acquired whereon a small ginnery and a few buildings were erected. Paddy continued to be the principal object of study at Hmawbi farm and Lower Burma stations, but jute and guinea grass were experimented with at Tharrawaddy and Delta Districts. The area at Mandalay has been extended temporarily. In addition to the usual dry zone crops, sugarcane received special attention at Hopin, and wheat, potatoes and *taungya* crops at Yawnghwe.

The reorganisation scheme provided for a central farm in each Deputy Director's charge and district farms in the chief districts. The value of these district farms becomes more and more apparent and the readiness of the cultivator to adopt methods which have been demonstrated as successful and the results of which he can see, is good augury for the future. Most valuable work was done at Mandalay in paddy cultivation, including investigation of the *Gwabo* pest. Manurial experiments showed that the effect of chemical fertilizers and cake disappears quickly while burnt paddy husk and plentiful cattle manuring give good results. Light seeding and transplanting of singles and doubles were found to save 60 to 70 per cent. of paddy used as seed and this system will be demonstrated. The importance of timely irrigation was emphasised in Mandalay, Kyauksè and Shwebo. Sixty thousand acres are now planted with improved seed, yielding 8 to 12 baskets per acre more than best local varieties. In Lower Burma improved strains fetched better prices, but premiums can only be expected when large quantities are available. Varieties of paddy suitable for the growing trade in parboiled rice were investigated.

Drilling sessamum having been found preferable to broadcasting a simple type of drill has been designed and gave good results. Four types of sessamum were selected as the result of tests at Tatkôn. In the Môn Canal area, the planting of early sessamum before irrigated paddy has given good results. Tests with wheat for macaroni and bread were continued and two selected strains of macaroni wheat giving a 13 per cent. yield over local mixed varieties are being multiplied at Padu. In Shwebo District, where the crop was almost unknown a few years ago, the area sown continues to increase. Selection work at Yawnghwe has produced useful strains, two of which are placed on a par with the best exotic strains produced at Pusa. The heaviest yields are obtained after a crop of potatoes in the same year. These results were obtained on *taungya* land which normally would have been abandoned. Groundnut experiments with foreign varieties at Yawnghwe and in the Pakôkku, Meiktila and Myingyan Districts gave higher yields than the local Shan nut, the oil content being heavier. Experimental sowings with the

Spanish nut in Meiktila caused a great demand, the type being less affected than others by unfavourable rainfall.

Owing to fall in prices, the area under *pèbyugale* decreased by 200,000 acres, but the possibility of the "Prussic acid" question affecting buyers has to be considered. Research work in the elimination of "Poisonous" varieties was restricted by the Agricultural Chemist's absence on leave, but is being continued. The prussic acid content appears to increase during storage. Other varieties were tried, and some gave good results, the Jackbean (Canavalia) being a valuable foodstuff. Following a demonstration meeting at Padu a large demand for *pèsingon*, which is popular as a field crop in rotation with cotton, was made, and sufficient seed to plant 600 acres was supplied.

The small cotton ginnery erected at Mahlaing handled over 16,000 viss of *kapas* from the white flowered *wagale* and the ginning percentage of the pure strains was 38·9 as compared with 33 for an ordinary *wagale*, a gain of Rs. 7 per 100 viss at last year's prices. Over 9,000 viss of seed was distributed and the importance of keeping the strain unmixed is recognised. Testing of selected strains at Padu again proved the superiority of the white flowering strains, the yield of No. 2108 being one-third more than that of local mixed varieties, and the ginning percentage one-eighth better. The strain is being multiplied rapidly. Cultivators are acting on the proved superiority of drill-sowing. Investigation of crosses was continued at Tatkôn, and the *wagyi-wagale* cross gave a pure white flower and a ginning percentage of 44. Investigation of exotic cotton was affected by a fire at Allanmyo in which a large supply of *Cambodia* was lost. Cultivators were encouraged to increase the area sown to *Cambodia* by loans under the Land Improvement Loans Act. The crop grown by local seedsmen fetched Rs. 20 more than ordinary *wagyi*. The newly constituted Provincial Cotton Committee is expected to foster cultivation in many directions, notably in maintenance of pure seed.

Sugar-cane cultivation has attracted attention as a result of the Indian Sugar Committee's visit, whose members were considerably impressed by the possibility of Burma as a large producer. If this proves correct, Government aid to cultivators by grant of advances for seed, crushing outfits, etc., and by the testing of high yielding varieties is desirable and private capital may be expected to provide central factories. Promising results were obtained in the Namyin Valley, Myitkyina District, and small plot experiments at Hopin with the striped Mauritius and Gilman varieties yielded 40 tons of cane per acre. These varieties will be multiplied and if found satisfactory distributed to cultivators. Sanction has been asked for a small power crushing and boiling plant at Hopin to be worked first by Government and then, if found to pay, to be handed over to a Co-operative Society formed among growers of cane. Experiments were also made at Singaing and Hmawbi and the prospects are favourable for extensive development.

Burma's tobacco crop suffers from bad curing, the process being usually carried on in the early rains. Samples sent to London were unfavourably reported on, both by commercial and scientific experts. An experiment of planting tobacco in the rains and curing in the dry weather is being made at Tatkôn.

Jute has now been tested for three years in Lower Burma, but is not yet proved to be a paying crop, owing to labour and freight difficulties.

Experiments are being continued in view of favourable small plot tests, and Government aid in the form of erecting baling presses and arranging for export may be desirable. Sisal hemp is being tested by an enterprising cultivator at Sèdaw.

The proposal for a dairy farm at Mandalay led to the trial of the several fodder crops which did reasonably well and should prove valuable. Millet mixed with weeds made into silage proved a useful cattle food. The *pwinbyu* pest was further investigated. Guinea grass again did well.

A combination of drilling, manuring and liming at Yawnghwe trebled the outturn of potatoes ; tests of exotic varieties were promising. Linseed and barley were successful despite insects and rust damage. Onion cultivation is spreading.

Important developments are in train with cocoanut cultivation on the seaboard and delta areas a plantation having been begun at Hmawbi. The Mandalay dairy farm proposed has been sanctioned and land acquired, but the choice of breed to be used is still undecided, pending advice by an expert from India.

Seed Distribution and Demonstration.

85. In the Southern Circle 1,500 baskets of pure strain paddy seed were distributed from Hmawbi, also large amounts by the district farms in Hanthawaddy, Pegu, Toungoo, Tharrawaddy and Minbu. Small quantities of pure seed were given to local seedsmen by District Agriculturists. Over 9,000 viss of cotton seed was distributed from the Mahlaing ginnery. The Allanmyo fire destroyed Cambodia cotton seed, but seeds from the previous crop was collected and distributed for the planting of 1,500 acres. In the Northern Circle, 9,400 baskets of selected paddy were given out from Mandalay and Kyauksè, and over 3,000 baskets of wheat. Hopin distributed over 14,000 sugar-cane setts. The demand for improved seeds largely exceeds the supply.

Demonstration work continues to be of great value and the delegates attending the Mandalay Agricultural and Co-operative Conference were encouraged to visit the farm there. The interest taken in the show of agricultural implements and machines justifies more attention being given in future years. District Associations and Conferences were availed of by officers of the Department for opportunities for helpful advice. The

Agricultural Engineer was much in demand by firms, co-operative societies and private individuals.

Interest is being taken in motor tractor trials, but as yet the tests are inconclusive and tractors are being purchased for extensive use on the farms. Prices of implements are still high, but the implement depôt at Tatkôn is likely to do well. Consignments of Cyprus ploughs have been readily sold. A cattle show at Pyawbwè proved successful. Market gardening was encouraged in the Chin Hills and Kachin Hill Tracts. Opinion appears to favour legislation dealing with fertilisers.

Veterinary Department Staff and the Veterinary School.

86. One Superintendent was absent on military duty throughout the year, and another proceeded on leave after being released from military duty in May 1919. This left only one Superintendent on duty in the Province. The Subordinate Staff at the end of the year consisted of twenty-six Inspectors, including two in the Shan States, and 168 Veterinary Assistants in Burma proper, and twenty-one serving in the Shan States. There was an increase of seven Inspectors and six Veterinary Assistants over the figures for the preceding year. The number of animals treated by Assistants while on tour rose from 73,443 to 86,433, exclusive of those dealt with in the Shan States. The cost of the department rose from Rs. 3·81 *lakhs* to Rs. 4·31 *lakhs*, the increase occurring chiefly under the heads of Subordinate establishment and contributions to District Funds.

There were 45 students under training at the Veterinary School at Insein at the close of the year, as compared with 42 at the end of the previous year. All the 18 pupils in the Senior Class passed the written examination, but five failed in the practical work, and were kept back. The behaviour of the pupils was excellent.

The number of animals treated at the Veterinary Hospital declined slightly from 1,999 to 1,934, and the average daily attendance from 23 to 22·03. The number of slides examined at the laboratory declined from 6,858, of which 4,942 came from the districts, to 5,562, of which 4,442 came from the districts. The number of pupils in the Veterinary School at Taunggyi rose by 1 to 7. No breeding operations were undertaken during the year.

Cattle Disease.

87. The number of deaths from rinderpest in Lower Burma was 40,744, a figure which has only four times been equalled or excelled during the last thirty years. The Irrawaddy Division suffered most, more than half the deaths falling to its share. Pantanaw, Kyônpyaw and Ingabu Townships reported the heaviest mortality. In Upper Burma the heaviest losses occurred in the Thayetmyo District, but the Pakôkku,

Lower Chindwin and Yamèthin Districts also suffered severely. The excellence of the arrangements made for combating the disease in the last named district prevented it from extending northwards along the railway line, and reflected the greatest credit on all concerned. The total number of inoculations performed fell from 64,824 to 55,628, but the number of inoculated animals that died was only 363, as against 838. The great obstacle to the eradication of cattle disease is the curious apathy of the mass of the people, which necessitates the entertainment of a far larger staff than would be necessary if the Veterinary Department were assured of the active co-operation of all and sundry in combating this serious economic evil. It is pointed out that the penalties for neglect of the segregation rules are, judged by European standards, absurdly inadequate.

Foot-and-mouth-disease was responsible for considerable mortality in Bassein, Myaungmya and Henzada. There was much sickness in Shwebo, but few deaths; the longest death-roll in Upper Burma was recorded in the Amarapura Subdivision. There were mild outbreaks in several other districts of Upper and Lower Burma. Anthrax and allied diseases accounted for 1,607 deaths in lower, and 284 deaths in Upper Burma; Bassein, with 307 deaths, was the chief sufferer. Surra was reported on the Taunggyi-Kèngtūng Road, and in Mawkmai and Lawksawk. Deaths from rinderpest and foot-and-mouth diseases were in either case more than double the number of those recorded in the preceding year. The mortality from anthrax was less by about 200.

Stock.

88. The number of mature bulls and bullocks increased by about 2,000 to 2,375,32-, while the number of cows decreased from 1,332,591 to 1,293,125. There was a further decline in the number of mature buffaloes from 809,290 to 784,279, doubtless reflecting the ravages of rinderpest, to which buffaloes are more susceptible than kine. The number of stallions and mares showed a slight decrease, while that of geldings increased by nearly a thousand to 35,342. The number of mules rose by 500 to 1,700. Sheep declined by 2,000, and goats increased by 5,700. Pig breeding is on the increase, and the number of swine showed a considerable rise from 368,886 to 433,671. Successful cattle-shows were held at Pyawbwè and Pyinmana, and excellent prices were realized or the prize cattle. The price of carts and wheels was still high, but the number of these, and of ploughs, showed a satisfactory increase.

Agricultural Loans.

89. The agricultural advances made by Government during the year, exclusive of advances to co-operative societies, declined by 7 *per cent.* from Rs. 12·83 *lakhs* to Rs. 11·91 *lakhs*. The amount outstanding

at the beginning of the year was Rs. 14·67 *lakhs*, and the total amount on loan was thus Rs. 26·58 *lakhs*, or 4 *per cent.* less than in the previous year. The total amount for collection, excluding interest, declined by 10 *per cent.* to Rs. 17·35 *lakhs*, of this amount Rs. 12·02 *lakhs* were collected, Rs. 1,683 remitted, and Rs. 2·25 *lakhs* were suspended by competent authority.

The district in which the largest advance was made during the year was Prome (Rs. 1·67 *lakhs*), followed by Akyab and Yamèthin (over Rs. 1·25 *lakhs* each), Amherst, Pakôkku and Shwebo (over half a *lakh* each), and Pegu, Thatôn and Meiktila (over Rs. 40,000 each). Five districts (Yamèthin, Prome, Shwebo, Kyaukpyu and Akyab) are responsible for nearly half of the total amount advanced, and the first four of these with Meiktila, account for nearly half the total balance of Rs. 14·54 *lakhs* outstanding at the end of the year.

The amount suspended by competent authority during the year increased by Rs. 88,446, but the amount overdue declined by Rs. 73,000 to Rs. 3·38 *lakhs*. The heaviest suspensions were granted in Prome (Rs. 61,647) and in Yamèthin (Rs. 37,975); in three other districts the amounts exceed Rs. 15,000. Unfavourable agricultural conditions account for the suspensions granted.

Of the total amount overdue the four districts of Yamèthin, Kyaukpyu, Thatôn and Akyab are responsible for two-thirds, and in only five other districts did the amount exceed Rs. 10,000. In the majority of districts the amount overdue on the 31st March 1919 was accounted for before June 30th, 1919.

The amount advanced under the Land Improvement Loans Act fell from Rs. 7,600 to Rs. 4,400. Rupees 38,875 were outstanding from the previous year, making the total amount on loan Rs. 43,275. Of a total sum of Rs. 11,514 due for collection during the year Rs. 6,666 were paid, Rs. 1,772 remitted Rs. 2,806 suspended, and Rs. 2,118 remained overdue. The balance outstanding at the end of the year was Rs. 34,837 as compared with Rs. 38,874 in the preceding year. At a conference held at Mandalay measures were considered for making further use of the Act.

The rate of interest charged by the Government of India to the Local Government on the Provincial Loan Account remained at 5½ *per cent.* and the interest charged by the Local Government to cultivators at 6¼ *per cent.* with a penal interest of 8 *per cent.* During the year of report the net financial result of the loan operations, after repayment of principal and interest to the Government of India and deduction of principal remitted, was a profit of Rs. 12,067 as compared with a profit of Rs. 21,217 in 1918-19.

Protection from Floods.

90. Embankments constructed for the protection of cultivation from floods are maintained by the Irrigation Branch of the Public Works Department. The area so protected rose from 819,904 acres to 847,481, but the gross revenue fell from Rs. 32·65 *lakhs* to Rs. 26·41 *lakhs*. The explanation is that a sum of some six *lakhs*, omitted from the figures of 1917-18, helped to swell the figures for 1918-19. The increase in the protected area would have involved an increase in the revenue of 1919-20, but for the fact that a certain portion of the revenue remained uncollected at the end of the year. Working expenses fell from Rs. 4·60 *lakhs* to Rs. 4·36 *lakhs*, and net revenue from Rs. 28·05 *lakhs* to Rs. 22·05 *lakhs*. Capital accounts are kept only for the more important embankments along the lower course of the Irrawaddy River on its right bank: for other embankments along the Sittang River and elsewhere, only revenue accounts are kept. The total capital outlay on the former rose from Rs. 48·63 *lakhs* to Rs. 52·65 *lakhs*, and the outlay during the year from Rs. 2·43 *lakhs* to Rs. 4·02 *lakhs*.

The raising and strengthening of the Irrawaddy Branch of the Yandoon Island Embankment was continued, and the Panhlaing Branch construction was extended for a further 6½ miles. Owing to scarcity of labour the progress on the work was much slower than was anticipated. The total expenditure during the year amounted to Rs. 1·99 *lakhs*, making the total expenditure to date Rs. 8·16 *lakhs*. No breaches occurred in the embankment during the year. The Yenwe River training embankments in the Pegu District were extended below the railway bridge. On the 13th of June 1919, the embankment was breached, and was not closed till the end of the rains: the cost of closing the breach was Rs. 11,578. The expenditure on the embankments and retirements amounted to Rs. 69,216, and the cost of maintenance to Rs. 8,303. A retirement was made at the Myitkyo loop embankment, on the Sittang River, at a cost of some Rs. 5,000. The erosion during the year was very heavy, and the river was expected to break through within two years. The Sittang Embankment was maintained in good order during the year, and work was started on the extension.

Weather and Crops.

Character of the Seasons.

91. This subject has been mentioned briefly in paragraph 10 above, and treated in greater detail in paragraph 12. The season was unsatisfactory on the whole.

133969

Outturns and Prices.

92. The total estimated outturn of unhusked rice was 5,454,118 tons as against a (revised) estimate of 5,920,157 tons for the preceding year. The return for the year under report shows therefore a decrease of 466,039 tons, due to the reduction in the estimated yield per acre. The yield of cleaned cotton was estimated at 12,413 tons, a slight increase over last year's figure. There was a large increase in the area under cotton, but the chief producing districts suffered severely from insect pests. Groundnuts suffered from drought, but the area planted with this crop increased, and the estimated outturn rose from 99,087 tons to 103,995 tons. The estimated outturn of small white beans declined from 141,885 to 75,749 tons, owing to the fall in prices. Rubber, according to figures supplied by the Customs authorities, increased its output by 774,473 lbs. to 4,923,715. Variations in other crops do not call for comment; none of them are of great importance in the export market.

At the end of June 1919 1,403,402 tons of cargo rice had been exported. For the crop of that year a maximum price of Rs. 150 had been fixed by Government in the interests of India to relieve a great scarcity of food grains. The maximum figure had already been reached and the price of paddy was quoted in Rangoon at Rs. 150, remaining at this figure until supplies were exhausted and the season came to an end early in November. But the figure quoted in the market returns was purely nominal The signing of the peace treaty in July led holders to believe that the control was likely to be removed and despite a notification to the contrary paddy was only forthcoming at a premium. The commandeering of stocks by Government at the control price eased the situation temporarily, but this procedure depended for success upon combined and effective support from the large traders, which was not received. The market price therefore rose above the quoted price to Rs. 165 or Rs. 170. The quantity exported totalled 2,593,766 tons.

For the new crop the control was continued, but the system was revised. The object of the new scheme was to prevent an undue depletion of food stocks in Burma owing to the high level of world prices for food grains. The essential principle was to limit the amount for export and its price. The allotment for export was provisionally fixed at 1,800,000 tons of cargo rice, and purchases of rice for export were not to be made at a higher rate than the equivalent of Rs. 180 per 100 baskets of paddy. It was expected that by this arrangement the stock left in Burma would suffice for home consumption at prices not much above that taken as the basis in purchasing for export, and that within the Province supplies would be distributed according to the variations of demand expressed in local prices. Prices rose to the maximum immediately and from the middle of April onwards exceeded this figure,

being quoted at Rs. 205 to Rs. 210 in Rangoon by the end of June. At other ports and up country prices followed a similar course. It had been recognised that the control arrangements could be frustrated if holders were to risk a loss by holding up their stock, for example, or by making local corners, and when making the scheme public it was announced that if the retail price of rice over any considerable area rose excessively measures to restore control would be considered. Up to the close of the year no action was found necessary. Other grains rose in sympathy with rice. The oil crops, sessamum and groundnut, showed an advance in most districts and so did tobacco. But the price of cotton and chillies declined, and, as in the previous year, low prices still ruled for the better class of beans.

Co-operation.

Administrative and General.

93 Bhamo was the only new district appearing in the year's returns: the co-operative movement has now gained a footing in 28 districts and in the Northern Shan States. In many districts the expansion into new areas was considerable. Societies were founded in the Kyaikmaraw and Kyain Townships of Amherst, in Pa-an Township, Thatôn, in Monyo Township, Tharrawaddy, and in parts of Myingyan and Sagaing Districts hitherto untouched. This extension was almost entirely the work of non-official effort.

The superior administrative staff remained unchanged, there being one Registrar for the Province, assisted by two Joint Registrars, for Upper and Lower Burma respectively. There were nine sanctioned charges for Assistant Registrars and 32 for Junior Assistant Registrars, and the question of the incorporation of these officers into the cadre of the Provincial and Subordinate Civil Services was under consideration during the year. The system of deputation of officers from the Provincial Civil Service to fill Assistant Registrars' posts proved unsatisfactory owing to the general shortage of officers. The staff of Junior Assistant Registrars had to be drawn upon to fill certain of the charges, and the vacancies created could not in all cases be filled.

The cost of the department in staff and contingencies showed a considerable increase, from Rs. 2·56 *lakhs* to Rs. 3·06 *lakhs*, over last year's figures, and the amount spent by societies in management and contingencies from Rs. 2·69 *lakhs* to Rs. 4·14 *lakhs*.

The number of societies of all kinds rose from 3,612 to 4,394, and the number of members from 88,860 to 108,868. Unions increased from 325 to 409: the rise was due partly to the policy of splitting up those which had grown unwieldy, and partly to the general extension of credit co-operation. Agricultural credit societies increased from 2,675 to 3,319,

non-agricultural credit societies from 123 to 157 and district co-operative associations from 28 to 33. Cattle insurance societies declined by 5 to 381.

The working capital of all closses of societies rose from Rs. 2,22 *lakhs* to Rs. 2,52 *lakhs*, or, if the money lent by one class of society to another class be omitted, from Rs. 1,55 *lakhs* to Rs. 1,76 *lakhs*. Two amendments to the rules were made during the year. The first made the awards of arbitratrators enforceable as decrees, and the second empowered the Registrar to rescind any resolution or action of any society which is, in his opinion, outside the scope and objects of the society. Several amendments were made to the bye-laws of the Upper Burma Central Co-operative Bank. Of other amendments the most important was that made in the model bye-laws of agricultural credit societies enabling the committee to demand interest on loans once, instead of twice annually from members in approved cases. The Fifth Provincial Agricultural and Co-operative Conference was held at Mandalay in the beginning of September, 1919, and was a great success.

Unions and Central Banks.

94. Guaranteeing unions, lately described by an Indian authority as "the only genuinely indigenous co-operative Institution which has yet been developed in India" were evolved in this province a dozen years ago. However open to the criticism of the dogmatist, they continued to work well, and it is impossible to imagine how the movement would get on without them. Their weak point continued to be that the union committees themselves did too little inspection. The formation of union group boards, which control the work of the paid union supervisors, proceeded methodically. Reference was made in last year's report to the obstacles existing in the Delta districts to the spread of the union system: in the year under report indications were received that the advantages of this form of co-operative organisation were beginning to be realised.

The Upper Burma Central Co-operative Bank passed through a period of some difficulty. A depreciation of Rs. 1·20 *lakhs* in the Government securities held by the Bank as fluid resource against deposits had to be duly written off in the profit and loss account, with the result that the Bank was unable to declare a dividend. This was unfortunate, as tending to create a suspicion in the mind of the public as to the soundness of the Bank, but the course pursued was unquestionably the wisest. Had the depreciation not occurred there would have been Rs. 86,871 net profit to divide. A further source of embarrassment arose from the phenomenal rise in the rate of exchange between India and the United Kingdom at the beginning of 1920. One of the great weaknesses of the co-operative system in Burma is undue reliance on European capital, and it is a weakness which is likely to

become accentuated by the rapid march of political events. The rise in exchange discouraged fresh deposits from Europeans, and deposits withdrawn on due date were not renewed. The situation gave rise to some anxiety in January and February, and it appeared likely that the Bank's ability to keep pace with the expanding requirements of societies might be seriously impaired. Fortunately for the Bank, exchange soon dropped, withdrawals practically ceased, and new money began to come in, with the result that at the close of the year there was a net increase in deposits of Rs. 2,85,673 as compared with the figure on June 30th, 1919. However, surplus money from District Central Banks is now beginning to find its way into the Provincial Bank in substantial amounts, and as these banks increase in numbers and importance, it is hoped that in the course of time the Burmese capital in the Provincial Bank will come to predominate, and the movement stand more firmly on a national basis.

New District Central Banks were registered at Henzada, Mônywa, Letpadan and Rangoon (for Urban Societies). That is to say that at the close of the year there were eight District Central Banks dealing with Agricultural Credit Societies, and one dealing with Urban Societies. A gratifying feature of the year was the progress made by the older established District Banks towards independence of the Provincial Bank as a creditor. Thus the Pakôkku Central Bank diminished its Provincial Bank loan from 2½ *lakhs* to a sum below 2 *lakhs*. The Pegu Bank, which had a debit balance of Rs. 36,000, showed a credit balance at the end of the year, as did the Sagu-Salin Bank. Local deposits in all District Central Banks increased by nearly four *lakhs* to Rs. 13·61 *lakhs*. Orders were issued during the year for the formation in all District Banks of bad debt funds, where there were none already in existence.

Agricultural Credit Societies.

95. In connexion with the wide expansion of agricultural credit societies a word of warning is uttered in the annual report against a tendency to go too fast, especially in new and untried areas, and insistence laid upon the necessity for careful and thorough spade-work before a society is admitted to registration. The desire for cheap money is not always synonymous with enthusiasm for co-operative principles, and statistics by themselves can give little indication of the real vital progress of the movement. Attention is called to the very low percentage of capital, (·6) representing deposits by members. This is lower than in any other Province in India, and indicates that thrift has not hitherto been the strong point of co-operative societies in Burma. A class societies increased from 55 to 76, B class from 383 to 451, C class from 1,888 to 2,412, and D class from 362 to 399. The percentage of D class societies—that is of societies so unsatisfactory as to be in danger of liquidation—was the lowest for five years. It is noteworthy that

nearly all D class societies were of long standing. Areas newly opened up to co-operation showed a very small proportion of these bad societies, a significant indication of gradual and steady improvement. The proportion of repayments by members rose from 21·8 *per cent.* to 27·23 *per cent.* the precentage of repayments by societies to the Bank increased from 25·1 to 27·64. Repayments were poor in Henzada, Bassein, Prome, Minbu, Kyauksè and Shwebo, but unexpectedly good in Yamèthin. The total number of societies in liquidation during the year rose from 139 to 146. The system of appointing whole-time liquidators from the cadre of auditors paid from the Provincial Audit Fund was continued, with good results, though progress was not so rapid as could be desired. There was a welcome improvement in the amount recovered, principal Rs. 62,208, as against Rs. 19,092, and interest Rs. 26,622 as against Rs. 10,627. The amount outstanding rose from Rs. 1,95,411 to Rs. 2,74,769.

Colonisation Areas.

96. The Sittang colonies in the Kadônbaw and Yitkangyi areas gave some cause for anxiety during the early part of the year, largely owing to the fact that they had been left for a year without the guidance of a Colonisation Officer. However the high price of paddy saved the situation, and the repayments of Government advances reduced the total outstandings by approximately 2¾ *lakhs*. No new settlers were introduced into the Yandoon Island, but allotments were made to societies already formed, and were demarcated on the land. The colony societies in Myitkyina District had a very successful year, and instalments of Government loan were paid with ease. In the Ye-u Canal Tract an additional area of 15,280 acres was allotted among 1,758 families, but the Co-operative Department had very little direct concern with the work done by the Colonisation Officer, who carried it out in concert with the District authorities.

Other Societies.

97. The year saw a further considerable increase in the number of Urban Societies, or Town Banks. The development of this branch of co-operation is particularly encouraging, for these societies are from the outset given to understand that they will receive no aid from the Central Banks, and that their chief function is to mobilise local capital. Where a Savings Bank Branch is attached to the society, the savings of the poor, down to the lowest sums, are gathered in by the society's collector. These Urban Banks are a genuinely Burmese institution and serve to finance the middle class merchant, and even, in some cases, the larger broker. An interesting evolution was the establishment of an Urban Central Bank in Rangoon. Of societies for production and sale the colony societies in Myitkyina, Pegu and Hanthawaddy disposed of their

paddy as usual by co-operative sale and realised unprecedented prices. The Pakôkku wholesale society continued to do useful business in disposing of groundnut and other crops, and in the purchase of rice for societies in the district. A new institution at Mandalay was the "Hita" Society, which undertook the milling of rice, and its sale in dry crop areas at a fair price. A ginning factory, paddy mill and saw mill were among the enterprises undertaken by co-operative agency. Three societies of fishermen held co-operative leases of fisheries in Tharrawaddy: two did well, but the third suffered loss. The term of the Government guarantee in support of the Central Cattle Reinsurance Society lapsed during the year. The Central Society had a reserve of Rs. 10,000 invested in the Upper Burma Central Co-operative Bank, and a General Fund of Rs. 5 600, and was considered strong enough to stand alone henceforward. The primary insurance societies showed no improvement, in spite of the reduction of premia referred to in last year's report. Cattle insurance is unpopular, and a special Sub-Committee was appointed to advise on the best methods of making it more attractive.

Agri-Horticultural Societies.

98. The Agri-Horticultural Society of Burma, with headquarters and garden at Rangoon, continued its useful work as the only organisation of its kind. Membership fell from 211 to 193, but the loss on the year's working, Rs. 825-15-6, was less than that in the previous year, Rs. 962. Heavy expenditure on repairs and renewal of equipment account for this loss. Receipts rose from Rs. 44,212 to Rs. 49,826 and expenditure (including Rs. 4,431 depreciation) from Rs. 45,174 to Rs. 50,652. There was a satisfactory increase of receipts from sale of flowers and plants from Rs. 23,186 to Rs. 27,788. The Flower and Vegetable Show for school gardens was an improvement on previous years. The museum of forest products collected by the Forest Department continued to occupy the Council Hall. The question of the society ceding the present site or part of it to Government was under discussion; and the society consider that if its work is to be of permanent value to the Province a suitable site permanently assured for its operations is necessary.

Forest Reserves, Forest Settlement, Demarcation, Survey and Working Plans.

99. The total area of reserved forests at the end of the year was 29,874 square miles against 29,336 square miles last year, the addition being due to reservation and recomputation (613 square miles) *minus* a disafforested area of 75 square miles. The area of unclassed forest at the end of the year was estimated at 115,891 square miles against 116,829 square miles last year. The difference is due to the reasons

already noted, and to the spread of cultivation Five hundred and eighty-four square miles were finally settled and 2,767 square miles were under settlement; 1,674 square miles were taken in hand during the year. Two hundred and forty-eight miles of exterior boundaries were demarcated at a cost of Rs. 6,564. Repairs to 3,126 miles of boundaries were done for Rs. 23,326 while up-keep of 521 miles of interior boundaries cost Rs. 1,911. Four hundred and seventy-eight miles of boundaries awaited demarcation. The special Forest Survey party surveyed 398 square miles on various scales in the year under review. In addition a special party organized by the Commissioner of Settlements and Land Records, surveyed 300 square miles in the Delta; but no less than 8,198 square miles of reserved forest remained still unsurveyed.

During the year a Conservatorship for Working Plans was created. As stated last year the increased interest in timbers other than teak has brought about an entire change in ideas regarding working plans, which will in future largely provide for complete exploitation of all marketable species followed by concentrated regeneration. A good many existing working plans will need revision in the light of present day requirements.

Protection of Forests.

100. The number of detected offences against the forests laws rose from 4,600 to 6,132, of which 23 were injuries to the forests by fire, 4,381 unauthorised fellings, 361 unauthorised grazings and 1,367 other offences. The number of cases taken to Court was 701 and the percentage in which a conviction was obtained was 82·3. The figures for last year were 667 and 89·2 respectively. Fines for breaches of contracts and agreements, or for excess extraction under licenses amounted to Rs. 11,039. The figures exclude the Tenasserim Circle, from which no information was supplied. They also exclude Rs. 1,941 being fines realized in the Hlaing Circle, from contractors for breaches of contracts which were not classed as forest offences. One thousand two hundred and seventy-seven square miles were protected from fire during the year as against 1,347 square miles in the last year. The cost per square mile was Rs. 56·5 and the percentage of successful protection was 96·8. Fire-protection in teak forests is now practically confined to experimental areas. In areas under special regeneration operations fire-protection is introduced and maintained until the stocking is considered to be complete and young trees are big and vigorous enough to withstand fire. In this way teak is favoured in comparison with other trees, which, as a general rule, cannot stand fire to anything like the same extent. Of the reserved forests 81·2 per cent. were closed to all grazing throughout the year; 12·1 per cent. were open to grazing (but not browsing) for part of the year and 6·4 per cent. for the whole year. Only 0·3 per cent. were open to all animals for part of the year. Four thousand and thirty-eight

head of cattle were impounded for trespass, the increase occurring chiefly in the Meiktila and Southern Shan States Divisions, and being due to increased activity on the part of the subordinate staff. Save in a few districts the grazing question is not serious. The exceptions are in most cases due to herds of cattle belonging to Indian and Nepali breeders. The incidence of grazing is likely to become more acute as concentrated regeneration spreads—not because there will be insufficient area, but because the present haphazard methods of letting cattle loose anywhere and everywhere will have to be controlled and the animals will have to be confined to definite blocks. Conservators as usual note upon damage by wild animals and insects, but there is nothing out of the ordinary in their reports. The Kheddah operations in the Southern Circle are reported to have been useful in that the damage by wild animals was less than usual. With an increasing number of far away forest villages it will be necessary to issue more guns for the protection of crops in *taungyas*.

Improvement of Forests.

101. The total amount expended on roads and buildings rose from Rs. 3·09 *lakhs* to Rs. 4·01 *lakhs*. The expenditure under this head, however, is still far short of the sum necessary for proper development of the forests. The importance of roads cannot be overestimated, because it is obvious that the expansion of trade in so-called jungle-woods, which will not float is impossible without them. The same remark applies to buildings. New divisions cannot be formed without headquarters, houses and offices. Revenue will therefore suffer because not only will illicit extraction, like that which is so rampant in the Delta, not be adequately checked, but there will be delay in working out schemes for more intense exploitation of the forests. One hundered and eighty-six miles of cart roads were constructed at a cost of Rs. 69,764 and 304 miles of bridle-paths for Rs. 55,852. Expenditure on the up-keep of 4,292 miles of existing roads and paths amounted to Rs. 94,847. Expenditure on new buildings, including rest-houses and quarters for the subordinate staff, amounted to Rs. 1,02,234 against Rs. 84,313 in 1918-19. Repairs to all buildings cost Rs. 72,774.

Sylvicultural operations in the forest depend almost entirely on labour, and the change wherever possible from the selection system to concentrated fellings, followed by regeneration by artificial methods, involves the introduction of labour on a large scale. This is being done mainly by the institution of forest villages, which were established in most divisions throughout the Province. The importance of this question cannot be exaggerated. During the year 5,049 acres of *taungya* plantations were added, of which the Northern and Hlaing Circles claimed 1,317 and 2,022 areas respectively. The species

planted was chiefly teak, and in a lesser degree teak mixed with valuable hard woods such as *pyinkado*, *pyinma*, *yemane*, *taukkyan*, *hnaw*, etc. Four hundred and seventeen acres of *Cassia Auriculata* plantations were formed in the Meiktila Division but failed owing, it is said, to caterpillar and drought In view of the fact that there is now no demand for *Cassia Auriculata* the planting of this species has been abandoned. Much experience was gained in the collection of seed and methods of sowing and planting. This knowledge has been embodied in a book entitled "Observations on the Germination and Behaviour of Tree Seedlings with special reference to *Taungya* plantation" by Mr. H. R. Blanford, who has since been appointed as Sylviculturist for Burma.

Exploitation of Timber.

102. Exploitation of all marketable species followed by concentrated regeneration is expanding rapidly and the demand for timber has resulted in increased extraction all round, of jungle-woods as well as teak, and by small traders as well as large firms. Selling prices also rose steadily throughout the year. Large increases in forest and clerical staffs will be necessary if the demands of the trade are to be met and the areas felled over adequately re-stocked.

The total number of teak trees girdled was 223,099 or nearly 50,000 more than last year. The increase was due largely to trees girdled in paddy-fields and small trees in clear fellings, but the position is one which calls for serious notice and the subject is under investigation. There is every indication that selection girdlings in reserved forests will have to be reduced in the near future if a steady revenue from teak is to be ensured. The total outturn of teak by Departmental agency rose from 89,783 to 105,040 tons. The output of logs in the Hlaing Circle (without extra girdling) was larger than ever and the cost of floating even less than before. The training works on the shallows of the streams in the Tharrawaddy District are now well understood and there is every reason to suppose that they can be continued indefinitely. The Departmental supply of timber for the Munitions Board was discontinued during the year and the organization closed down. During the time operations were proceeding the following timber was dealt with :—

1,786 tons teak (round).
25,757 „ „ (sawn).
6,210 „ other timber (round).
55,634 „ „ (sawn).
342,440 bamboos (8,233 tons).
2,328,114 sleepers (112,763 tons).

Departmental sales of teak timber realized Rs. 17·81 lakhs and of other woods Rs. 2·35 lakhs compared with Rs. 32·67 lakhs and Rs. 2·17 lakhs respectively in the previous year—1,285 teak squares amounting to 1307·6 cubic tons and remaining from the last indent, were shipped for the British Admiralty and 1233·5 tons supplied to the Eastern-Bengal State Railway. One hundred and twenty-seven and a half tons of teak

logs were sold in small lots by private tender for special purposes (usually for shipbuilding purposes). The outturn of teak by lessees was 71·5 per cent. of the outturn for the whole Province and amounted to 314,529 tons or 92,849 tons more than in the previous year. A good deal of timber is still held back owing to the accumulation of stocks. The floating season was good. Teak-logs extracted by lessees on which they did not wish to pay royalty realized Rs 4·3 lakhs or Rs. 37 per ton as compared with Rs. 41 the previous year and Rs. 25 in 1917-18. Licensees extracted 423,838 tons of timber as compared with 391,679 the previous year, but the extraction of fuel fell from 940,002 tons to 888,392 tons presumably because coal was available in larger quantities. The extraction by free grantees and right-holders was less than 5 *per cent.* of the total outturn of timber and under 4 *per cent.* in the case of fuel.

The total provincial outturn of teak from all forests rose from 326,567 to 439,906 tons and of reserved timber other than teak from 109,559 tons to 154,494 tons; the outturn of unreserved timber fell from 342,795 tons to 328,428 tons and of fuel from 1,236,599 tons to 1,109,277 tons.

Finance.

103 The financial results of the Forest Administration are shewn in Chapter V of this Report, entitled "Revenue and Finance other than Imperial."

Mines and Quarries.

The Indian Mines Act.

104. The only districts to which the Indian Mines Act at present applies are the Katha, Thatôn, Tavoy and Mergui Districts. The Act and Rules were applied to the Northern Shan States after the close of the year. The chief feature of the year was the withdrawal of the Government guarantee for the purchase of wolfram for munitions purposes, consequent on the conclusion of the War, and the resultant collapse of the wolfram market early in the year. In the Tavoy District, the chief centre of wolfram mining, extraction ceased at a large proportion of mines: several smaller and poorer areas were closed down, and several large mines ceased development work. No Mining Boards have been constituted under section 9 of the Act, but the Tavoy Board, established by executive instructions, met twice during the year, and continued to do useful work, and the Tavoy Chamber of Mines continued its activities throughout the year. The general health of employees on the mines was on the whole good, and the year was free from small-pox, cholera and plague, though there were slight outbreaks of influenza and pneumonia in Tavoy during the first three months of the year. The larger mines, which have dispensaries, continued to

furnish monthly returns of diseases and deaths amongst their employees. Housing and sanitary conditions in general tended to improve, owing to the closing down of the smaller and poorer areas. The health of the women and children employed on surface work was satisfactory.

In the Thatôn District daily labourers were paid at the rate of 12 annas without food, and 10 annas with food. No difficulty was experienced in getting sufficient labour except in the busy agricultural season. In Tavoy the closing down of some mines, and the limitation of mining operations in others during the second half of the year caused large numbers of Chinese and Indian employees to be thrown out of work. Most of these returned home, while some migrated to Mergui, and others settled down in the Tavoy District. The price of food-stuffs remained high, as did the wages of skilled employees, such as clerks, store-keepers, supervisors and engineers.

Coolies from Hazaribagh and Burmese ticket-of-leave convicts continued to be imported by Government and supplied to concessionaries during the year. The majority of the former class had their services dispensed with during the second half of the year, and were repatriated. The Burmese convicts continued to prove a success, and in very few cases were the conditions of their remisions broken. Women and childern were chiefly employed on the tributary system, the majority working above ground. There was one serious accident in the Ruby Mines, for which the company were not responsible. In the Tavoy District there were 27 accidents, causing 24 deaths, and 9 cases of serious injury. The majority of the fatal accidents appear to have been due to the fault of the victims, who disobeyed orders Two unsuccessful prosecutions were launched in Tavoy against Burman Managers for permitting the firing of shots by unauthorized persons. There were three successful prosecutions for the illegal possession of explosives.

New Concessions.

105. During the calendar year 1919, the number of new applications for prospecting licenses dealt with was 620, of which 220 were granted, 134 refused and 266 withdrawn. The corresponding figures for the previous year were 669, 242, 190 and 237. The number of applications for the renewal of prospecting licenses dealt with was 164, of which 135 were granted, 16 refused, and 13 withdrawn. The corresponding figures for the previous year were 185, 159, 13 and 13. The number of applications for mining leases dealt with was 13, of which 9 were granted, three refused and one withdrawn. The figures for the previous year were 8, 5, 3 and 0. The general decrease is probably sympathetic to the decline in the wolfram market, to which reference has already been made. Of the nine mining leases, two were granted for mineral oil, and rest for minerals other than oil.

Petroleum.

106. Petroleum was produced in the same seven districts as last, year. As before the amount produced in the districts of Akyab Kyaukpyu, Thayetmyo and the Upper Chindwin was comparatively insignificant. Their combined output was, however, nearly double that of last year, and there was a large increase from 473,800 to 1,085,030 gallons in the Upper Chindwin District. The total output for the Province rose from 274·90 million gallons to 293·74 million gallons, and its value from Rs. 1,62·25 *lakhs* to 1,75·78 *lakhs*. The Yenangyaung field of Magwe showed a decrease of 13 million gallons, owing to the weakening of the sands, the lack of matrials, and the difficulty of getting drillers. On the other hand the Singu Oil-field increased its output by 32½ million gallons, owing to greater activity by the Burma Oil Company. Pakôkku and Minbu Districts, taken together, account for a decrease of a million gallons: the Yenangyat field in the former is becoming exhausted. The average number of persons engaged in the industry rose from 10,704 to 11,223.

Wolfram.

107. The total output of wolfram declined from 4,443 to 3,578 tons, while its value fell from Rs. 1,06·98 *lakhs* to Rs. 53·77 *lakhs*, or almost exactly half the former figure. The bulk of the ore, as usual, came from Tavoy, whose output declined from 3,636 to 2,889 tons. The output from Thatôn sank to the insignificant figure of 32 tons, while the Mergui production declined by half to 194. The total number of persons employed in the industry decreased from 12,246 to 10,402.

Rubies, Sapphires and Spinels.

108. There was a further decline in the output of rubies, sapphires and spinels from the Ruby Mines District, the figure being 158,577 carats as against 164,115. The total value of these stones increased, however, from Rs. 6·04 *lakhs* to Rs. 10·80 *lakhs*. The value of rubies extracted advanced from 5 to nearly 9 *lakhs* of rupees, owing to the find of an exceptionally valuable ruby which was sold for 3 *lakhs*. The production of sapphires rose from 34,949 to 47,286 carats, and their value from Rs. 83,571 to a little over 2 *lakhs*: improved prices and the discovery of some fine stones were the cause. The number of workers remained practically stationary in the neighbourhood of 1,300.

Other Minerals.

109. Argentiferous lead ores are found almost exclusively in the mines worked by the Burma Mines Company at Bawdwin in the Northern Shan States. The outturn of lead remained about the same as in 1918, but there was an increase of nearly 200,000 ounces of silver

over the figures for the previous year. The value of the lead extracted rose from Rs. 59·62 *lakhs* to Rs. 66·81 *lakhs*, and the value of the silver from Rs. 44·34 *lakhs* to Rs. 48·70 *lakhs*.

The price of tin increased, and there was increased activity in tin mining throughout the year. The output of block tin in Mergui District rose from 101 to 137 tons, and its value from Rs. 4·21 *lakhs* to Rs. 4·88 *lakhs*. There was a very considerable rise in the output of tin ore, from 733 to 1,250 tons, which is just double the figure for 1917. The largest output came from Tavoy, with 508 tons as against 202, but the Mawchi Mine came close with 462 tons as against 334 in the preceding year. The value of tin ore rose from Rs. 13·61 *lakhs* to Rs. 18 *lakhs*.

Iron ore advanced from 26,680 tons, valued at Rs. 13,982 to 31,880 tons, valued at Rs. 15,947. The output from the Northern Shan States showed a slight increase, while the output from the Mandalay District rose by some 3,500 tons.

The output of amber rose from 3 cwt. to 7 cwt.; this commodity is liable to considerable fluctuations. The quatity of jadeite produced declined from 3,203 cwt. to 2,079 cwt., and its value from Rs. 3·78 *lakhs* to Rs. 2·80 *lakhs*. This decrease was due to two collapses of shafts in the Tawmaw Jade Mine, to the difficulty of obtaining labour, and to the prevalence of influenza.

The output of gold decreased from 171 ounces to the negligible figure of 38½ ounces. This was due principally to the fact that there was no output from the Myitkyina District, where the Burma Gold Dedging Company is no longer in existence. Platinum, which was found in association with the gold deposits worked by that Company, showed a blank return for the year. Antimony was extracted for the first time in the Southern Shan States, and from no other area during the year. The quantity was 6 tons 81½ cwt., and the value Rs. 2,000. Four and a half hundredweight of molybdenite, worth Rs. 1,042, were extracted in the Tavoy District, as compared with 3 cwt. valued at Rs. 825.

Quarry Stones and Clay.

110. The total output of building materials and road metal extracted rose slightly from 1,013,097 tons to 1,090,598 tons. The figures include ballast stone, granite, gravel, laterite, limestone, sandstone, white pebbles and other materials, for which separate figures are not available. Individual districts showed in some cases considerable variations between the years 1918 and 1919 and there in nearly every instance depended on the large or small demands made by the Public Works Department or local authority in connexion with road making or building. The value of the stuff extracted rose from Rs. 10·05 *lakhs* to Rs. 14·17 *lakhs*. The number of persons employed in quarries rose from 3,948 to 4,191.

The output of clay for pottery declined from 26,271 to 22,527 tons, and its value from Rs. 21,440 to Rs. 18,643. The figures, as was explained in last year's report, have no pretensions to accuracy. An interesting addition to the minerals of the Province is China clay, of which 165 tons were extracted in the Pakôkku District.

Revenue from Mines and Quarries.

111. The receipts from fees, rents and royalties on petroleum, rubies, jade and amber increased from Rs. 34·81 *lakhs* to Rs. 38·96 *lakhs*. But the figures are swollen by the payment of large outstandings from 1917-18 and 1918-19 in Magwe, and the true annual increase was only Rs. 1·07 *lakh*. A rise of some Rs. 3,000 in Akyab was due to the issue of fresh prospecting licenses, at an enhanced surface rent, to the Indo-Burma Petroleum Company. Myitkyina showed the considerable increase of Rs. 26,250, due to greater activity in jade and amber. In the Ruby Mines a continued rush of native miners accounted for an increase of nearly Rs. 14,000. Receipts from fees, rents and royalties on other minerals declined by Rs. 1·60 *lakhs* to Rs. 2·79 *lakhs*. The decrease in Tavoy of Rs. 1·84 *lakhs*, due to the slump in the wolfram industry, more than accounts for the total provincial decrease. The Mergui District showed an increase of Rs. 20,000, due to increased activity in tin mining. The general enhancement of revenue in the Pegu and Irrawaddy Divisions was mainly due to the increase in the issue of clay licenses for making bricks, an indication of a revival in the building trade after the war. The revenue of Katha District increased by nearly Rs. 6,500, owing to the issue of more prospecting licenses, and licenses to extract white pebbles. The new born wolfram industry in Yamèthin became moribund, and there was a decrease of Rs. 5,844 in the receipts of that district.

Manufactures.

Principal Industries.

112. The great bulk of the indigenous population is agricultural, and the important manufacturing and transport industries derive their supply of labour to a very large extent from the immigrant Indian population. No new industries were established during the year, and the principal existing industries continued to be rice-milling, saw-milling, petroleum-refining and the transport industries. Of these the first continued to be the most important, claiming more than half the total number of factories, and nearly half the total number of operatives employed. Some impetus was given to the cotton and silk-weaving industries by the establishment of Co-operative Weaving Societies at Budalin and Amarapura Shore respectively, and in connexion with the latter industry an attempt was made to revise the silkworm-breeding

industry in the Prome District. Co-operative financing was introduced into the lacquer industry of Pagan, but no large developments took place in it.

Factories.

113. The total number of factories on the register at the end of the year was 567, or 18 more than in the year 1918. Twenty-seven out of the total number remained closed during the year. Twenty-eight new factories were brought on to the register, including one flour-mill, nine engineering works, one petroleum refinery, one cotton-mill, fourteen rice-mills and two saw-mills. The registration of ten factories was cancelled. As in the previous year, five rice-mills were burned down. The average daily number of persons employed in factories rose from 70,918, of whom 5,131 were women, to 77,432, of whom 6,094 were women. The number of factories allowing an interval after six hours' work rose from 245 to 254; those exempted under Part C of Schedule I of the Act decreased from 239 to 165; factories working on a system of shifts increased from 2 to 114, and the rest made other arrangements. The cost of necessities rose during the year, and towards the end there was a good deal of industrial unrest, which in several cases culminated in strikes. The result of these was a general, and considerable, rise of pay. Influenza was still prevalent at the beginning of the year, but the health of operatives on the whole was thought to have been as good as, if not better than, that of the general population. Most of the mills were kept reasonably clean, and in most the water supply was adequate. The interest of the managers in their coolie lines seems to be increasing. Several firms at considerable expense have put up new buildings, and the close connexion between decent housing and a healthy and contented labour staff is recognised much more generally now than it was a few years ago.

The fencing of machinery has been making steady improvement, and very few accidents now occur which might have been prevented by better fencing. The total number of accidents rose from 294 to 331, but the number of fatal accidents declined from 20 to 14. Serious accidents increased from 91 to 115, and minor accidents from 113 to 202. Of the 14 fatal accidents 5 were clearly traceable to the victims' own carelessness, and might have been prevented by proper supervision. The number of persons prosecuted for breaches of the Factories Act rose from 11 to 15. All the prosecutions were successful, but one was subsequently quashed on appeal. The prosecutions were mainly for failing to fence machinery properly. Of the 540 factories actually working 308 were visited by the Inspector. The need for an Assistant Inspector, whose entertainment was sanctioned by the Secretary of State as long ago as 1917, becomes greater every year. A factor which makes the question of closer inspection more urgent is the large

increase in the number of children, from 548 to 883, which took place in the year under report.

Trade.

Maritime Trade Total Value and Revenue.

114. The aggregate value of the trade of the province exceeded that of any year before the war. This is chiefly due to the advancement of prices, though trade conditions did show a distinct improvement during the year. The trade balance, as demonstrated by the excess of exports over imports, was favourable. An important factor in the year's trade was the fluctuation and high tending of the exchange. As in the previous year the rise in prices was more marked in the case of imports than in that of exports. If Rs. 100 be taken as the price of eleven representative imported articles during the three years ending in 1901, the average figure for the year 1919-20 would be Rs. 289, as against Rs 276 in the previous year. If the same comparison were made in the case of ten elected exports, the average would be Rs. 177, as against Rs. 136 in 1918-19. Among the imports the highest individual figure was Rs. 500, for woollen piece-goods, a very considerable advance on last year's figure of Rs. 337. Grey piece-goods rose from Rs. 489 to Rs. 492, but white piece-goods declined from Rs. 433 to Rs. 398. An important decline from Rs. 379 to Rs. 259 occurred in the case of steel and iron goods. Salt showed a large decrease, but the figure for refined sugar nearly doubled itself. Among the exports rice bran showed an extraordinary appreciation from Rs. 32 to Rs. 204: rice itself rose from Rs. 126 to Rs. 189, while hides, cotton, rubber and lead all declined in price.

The main feature of the year, so far as the Burma trade is concerned, was the continuation of the control of rice, under which as much as 80 *per cent.* of the export went to India. The advance made in the Burma trade, both import and export, by Japan and the United States of America continued, though Japan's position, as compared with that of last year, was distinctly weaker. On the other hand the position of the United States was stronger. Both countries have pushed their trade with Burma to a very considerable extent. The freight situation was rather easier: the tonnage entering and clearing from the various ports, amounting to 3,113,733 and 3,132,266 respectively, as against 2,701,928 and 2,688,877 in the previous year. Excluding Government stores, the total value of private trade increased from Rs. 72·74 *lakhs* to Rs. 88·72 *lakhs*. The percentage of foreign trade, in this total fell from 49 to 39 *per cent*; that of Indian trade increased from 46 to 56 *per cent.*, while interportal trade remained constant at 5 *per cent.* The actual figures for this and the previous year

respectively were Rs. 34·79 *lakhs* and Rs. 35·56 *lakhs* in the case of the foreign trade, Rs. 49·82 *lakhs* and Rs. 33·54 *lakhs* in the case of the Indian trade, and Rs. 4·10 *lakhs* and Rs. 3·64 *lakhs* in the case of the trade between provincial ports. In the foreign trade the United Kingdom, the United States and Japan account respectively for 50,16 and 15 *per cent.* of the imports, and 40,3 and 7 *per cent.* of the exports. The value of Government stores in the foreign trade declined from Rs. 8·84 *lakhs* to Rs. 6·78 *lakhs*, but rose in the Indian trade from Rs. 1·30 *lakhs* to Rs. 1·84 *lakhs*, and in the coasting trade from Rs. 13·90 *lakhs* to Rs. 27·24 *lakhs*.

The total gross Customs duty collected decreased from Rs. 1,97 *lakhs* to Rs. 1,63 *lakhs*, and the net duty from Rs. 1,91 *lakhs* to Rs. 1,59 *lakhs*. The latter phenomenon is due to the fact that a very large quantity of the rice crop went to India, and no duty was levied on it. The gross import duty excluding the duty on salt, rose by 26 *per cent.* owing to the general increase in prices, and the somewhat easier position of freightage. Increases were recorded under all important heads except sugar, which showed a decline of 45 *per cent.* Salt duty fell by 14 *per cent.* from Rs. 14·70 *lakhs* to Rs. 12·63 *lakhs*. The most important fluctuation occurred under the head of Export duty, which decreased by 66 *per cent.* The gross duty realised at Rangoon declined by 10 *per cent.* to Rs. 1,58 *lakhs*, and the net revenue by 9 *per cent.* to Rs. 1,55 *lakhs*. At the subordinate ports of Bassein, Akyab, Moulmein, Tavoy, Mergui and Victoria Point the gross revenue collections fell from Rs. 21·09 *lakhs* to Rs 5·31 *lakhs*. This decline of 75 *per cent.* was mainly due to a heavy decrease in export duty. Import duty also declined, and the net revenue fell from Rs. 19·64 *lakhs* to Rs. 3·99 *lakhs*. All ports alike showed a decrease.

Rangoon Trade: Total Figures.

115. The principal commodities imported into Rangoon from foreign countries during the year were, in order of importance: cotton manufactures (Rs. 3,74 *lakhs*), metals (Rs. 2,49 *lakhs*), silk (Rs. 64 *lakhs*), sugar (Rs. 62 *lakhs*), machinery (Rs. 56 *lakhs*), hardware (Rs. 53 *lakhs*), provisions (Rs. 46 *lakhs*), liquors (Rs. 30 *lakhs*), matches (Rs. 28 *lakhs*), and motor cars (Rs. 28 *lakhs*). Each of these commodities, with the exception of matches, which declined by about Rs. 6 *lakhs*, showed a sensible increase, which in the case of each of the first two amounted to nearly one crore of rupees. The largest proportional increase occurred, however under the head of motor cars, the value of which has risen from Rs. 2·18 *lakhs* to Rs. 28·72 *lakhs*. There was a large increase, from Rs. 10,68 *lakhs* to Rs. 14,70 *lakhs* in the total value of all goods imported into Rangoon from foreign countries. The average value for the five years ending in 1915-16 was Rs. 12,33 *lakhs*. The goods most

largely imported from India were, in order of importance: manufactured cotton (Rs. 3,15 *lakhs*), twist and yarn (Rs. 2,34 *lakhs*), manufactured jute (Rs. 2,10 *lakhs*), coal (Rs. 91 *lakhs*), grain and pulse (Rs. 78 *lakhs*), provisions (Rs. 72 *lakhs*), spices (Rs. 57 *lakhs*), oils (Rs. 48 *lakhs*), tobacco (Rs. 44 *lakhs*), and metals, (Rs. 31 *lakhs*). These articles formed together 79 *per cent.* of the total imports from India. The total value of Indian imports rose from Rs. 14,03 *lakhs* to Rs. 14,96 *lakhs*.

The principal goods exported from Rangoon to foreign countries were, in order of importance: husked and unhusked rice (Rs. 6,25 *lakhs*), grain, pulse and flour (Rs. 2·08 *lakhs*), raw cotton (Rs. 1,87 *lakhs*), paraffin wax (Rs. 1,14 *lakhs*), hides and skins (Rs. 1,09 *lakhs*), timber (Rs. 1,06 *lakhs*), bran and pollards (Rs. 85 *lakhs*), and oil-cakes (Rs. 68 *lakhs*). The value of rice exported dropped by about half to Rs. 6,25 *lakhs*, the bulk of the crop having been diverted to India. There were large increases under hides and timber, but the most remarkable fluctuations were shown by bran (Rs. 2·78 *lakhs* to Rs. 85·43 *lakhs*) and oil cakes (Rs. 5·26 *lakhs* to Rs. 67·74 *lakhs*). The total value of exports to foreign countries declined from Rs. 20,01 *lakhs* to Rs. 17,56 *lakhs*. The principal articles in the export trade to India were rice (Rs. 16,72 *lakhs*), mineral oils (Rs. 5,47 *lakhs*), wood, including manufactured wood (Rs. 1,28 *lakhs*), grain and pulse (Rs. 92 *lakhs*), lac (Rs. 32 *lakhs*), and metals (Rs. 21 *lakhs*). The most marked feature was the increase of over 9 *crores* of rupees in the value of rice exported to India; grain and pulse also showed a rise, while metals declined by over 50 *per cent.* The net result was an increase of ten *crores*, from Rs 17,30 *lakhs* to Rs. 27,26 *lakhs*, in the total value of exports.

The share of Rangoon in the total foreign seaborne trade rose from 86 *per cent.* to 93: in the Indian trade it fell from 93 to 85 *per cent.* and in the interportal trade from 42 to 41 *per cent.*

Rangoon Import Trade.

116. The total number of cotton goods imported into Rangoon from India and foreign countries rose from Rs. 7,67 *lakhs* to Rs. 9,26 *lakhs*, and this class of articles again represented 40 *per cent.* of the aggregate value of private merchandise imported. Foreign imports of twist and yarn declined, and those from India advanced. Foreign piece-goods increased by 23 *per cent.* in quantity, and 28 *per cent.* in value. The bulk of cotton piece-goods come from the United Kingdom, but supplies from Holland were worth 24 *lakhs* as against 6½ *lakhs* in the previous year; Japan's supply decreased from Rs. 44 *lakhs* to Rs. 16 *lakhs*. Indian piecegoods advanced by Rs. 42·12 *lakhs* to Rs. 2,26 *lakhs*, Bombay being the chief exporter. There was a slight increase in the value of cotton blankets, mainly from Japan and Holland. Imports of hosiery rose from Rs. 12·12 *lakhs* to Rs. 17·77 *lakhs*.

The trade in silk improved both in volume and in value the latter rising from Rs. 46·05 *lakhs* to Rs. 64 *lakhs*. The quantity of raw silk imported rose from 49,733 to 74,261 lbs., and its value from Rs. 4·58 *lakhs* to Rs. 6,71 *lakhs*, China being the principal exporter. Goods made of silk mixed with other materials showed an increase of 80 *per cent.* in quantity, and nearly as much in value. They came mostly from the United Kingdom. Pure silk piece-goods advanced by 15 *per cent.* in volume and 36 *per cent.* in value: 85 *per cent.* came from Japan, as against 93 *per cent.* in the preceding year.

Imports of woollen goods declined in value by about 12 *per cent.* owing to a heavy decrease of Rs. 1·58 *lakhs* under yarn and knitting wool. Supplies from the United Kingdom increased in value from Rs. 11·31 *lakhs* to Rs. 11·55 *lakhs*. Apparel, excluding hosiery, showed an increased value of 31 *per cent.* Supplies from Japan were doubled, while those from the United Kingdom remained constant. There was a slight decrease in the value of haberdashery and millinery. Imports from the United Kingdom fell by nearly 3 *lakhs* of rupees but there was a slight increase in the Swiss supply.

There was a substantial recovery in the boot and shoe trade by practically 100 *per cent.* in quantity and 200 *per cent.* in value. Supplies from the United States rose in value from Rs. ·59 *lakh* to Rs. 6·99 *lakhs*.

The total imports of metals and ores showed an increase of 148 *per cent.* in quantity and 93 *per cent.* in value. The United States sent larger supplies of wrought tubes and pipes, and the United Kingdom of galvanised sheets and plates. Imports of tin declined by Rs. 2·35 *lakhs*. To the total value of this trade the United Kingdom contributed 46 *per cent.* and the United States 50 *per cent.*, an extraordinary reversal of last year's figures, which were 59 and 16 *per cent.* respectively.

The value of hardware imports showed a considerable increase, from Rs. 29 *lakhs* to Rs. 53 *lakhs*. Almost all consignments of agricultural implements came from the United Kingdom, and of enamelled iron ware from Japan. The value of machinery rose by 84 *per cent.* to Rs. 56·32 *lakhs*, and there was a substantial increase, from half a *lakh* to Rs. 17·18 *lakhs*, in the value of railway plant and rolling stock.

Provisions and oilman's stores increased in value from Rs. 21·58 *lakhs* to Rs. 46·43 *lakhs*. Supplies from the United Kingdom, the largest contributor, rose from Rs. 1·71 *lakhs* to Rs. 16·48 *lakhs*. Imports from the United States were more than doubled, but the Straits Settlements showed a falling off of one *lakh*.

Imports of fish, other than canned fish, showed a general expansion, the total volume rising from 198,848 to 234,452 cwt., and the value from Rs. 52·03 *lakhs* to Rs. 58·11 *lakhs*. The rise was showed by both the foreign and the coastal trade, the former of which consists mainly of dry salt fish from the Straits Settlements, and the latter of dry unsalted fish from Madras.

Imports of salt advanced by 19 *per cent.* in volume and 9 *per cent.* in value. The rise was chiefly due to three full cargoes, arriving from Spain, which had supplied none in the previous year. Aden and Port Said each supplied two full cargoes, and eight small consignments came from Liverpool by regular liners. Nearly the whole quantity went into bond, the balance remaining in bond at the end of the year being 16,250 tons, as against 12,960 tons at the end of the year preceding. English salt during the first six months of the year maintained its price at Rs. 147, but this dropped in October, 1919, to Rs. 130, where it remained. Aden salt stood at Rs. 136 till the end of September: at the close of the year the price had dropped to Rs. 120. Port Said salt opened at Rs. 128, and reached Rs. 108—110 in March. Spanish salt was quoted at Rs. 140 in May, but by December had dropped to Rs. 125. Imports of Burma salt showed a further increase, from 12,278 to 16,841 tons Prices ranged between Rs. 83 to Rs. 125 during the year. The unit for which these quotations are given is 1,000 viss or 3,600 lbs.

There was a decrease of 40 *per cent.* in the quantity of sugar imported, but owing to the enhanced prices the value rose by Rs. 6·63 *lakhs* or 12 *per cent.* The decrease was due to restricted arrivals of Java refined sugar from the Straits Settlements, though direct imports from Java showed an increase. Importations by coasting steamer, mostly from Bengal, showed an increase in value from Rs. 1·80 *lakh* to Rs. 24·95 *lakhs*. Imported liquor showed a welcome improvement by 54 *per cent.* in quantity, and 5 *per cent.* in value. Ale, beer and porter advanced by Rs. 3·98 *lakhs*, the increase being shared by the United Kingdom and Japan. The quantity of spirits imported increased by 19 *per cent.* due chiefly to an increase of Java rum, but the value declined by 17 *per cent.* Brandy and whisky both declined, in quantity and in value, but gin showed a recovery The import of wines increased by 50 *per cent.* in quantity and by 1 *lakh* in value. The total amount of all kinds of liquors imported was 509,031 gallons, the highest figure recorded since 1916-17.

The combined foreign and coasting imports of tobacco increased by 18 *per cent.* in volume and 4 *per cent.* in value. Foreign imports of tobacco, manufactured and unmanufactured, rose slightly from Rs. 27·50 *lakhs* to Rs. 28·16 *lakhs* and coasting imports from Rs. 41·85 *lakhs* to Rs. 44·07 *lakhs*. Coasting imports of unmanufactured tobacco advanced from Rs. 37·09 *lakhs* to Rs. 38·60 *lakhs*. Cigarettes from foreign countries rose from Rs. 1·54 *lakh* to Rs. 27·43 *lakhs*: imports from India declined by one-quarter in volume; but their value rose from Rs. ·73 *lakh* to Rs. 4·15 *lakhs*.

Mineral oils increased in value from Rs. 4·70 *lakhs* to Rs. 16·43 *lakhs*. Fuel oils and kerosene showed a large increase, but the imports of lubricating oils declined. The withdrawal of the prohibition against

the import of motor cars and motor cycles in December 1918 raised the value of the merchandise imported to Rs. 28·72 *lakhs* from Rs. 2·18 *lakhs*.

Owing to the restricted imports of explosives from the United Kingdom the total value of arms, ammunition and military stores declined by 39 *per cent.* to Rs. 3·72 *lakhs*. The total number of firearms imported rose to 1,823, of which the United States supplied 1,158.

Imports of foreign coal declined by about half to 6,471 tons; nearly the whole of which came from the United Kingdom. Supplies from India showed a considerable increase in value from Rs. 30·02 *lakhs* to Rs. 91·20 *lakhs*. Matches, almost all from Japan, decreased by Rs. 6·12 *lakhs* to Rs. 28·62 *lakhs*. The imports of paper and pasteboard showed hardly any variation. Soaps, mainly from the United Kingdom, rose from Rs. 14·03 *lakhs* to Rs. 25·34 *lakhs*. Glassware, from the United Kingdom and Japan, increased from Rs. 4·38 *lakhs* to Rs. 12·35 *lakhs*.

Exports of Rice.

117. The combined exports of husked and unhusked rice from all the ports in Burma (excluding interportal trade) amounted to 2,335,111 as against 2,487,171, but the value rose from Rs. 24·14 *lakhs* to Rs. 29·90 *lakhs*. Exports to foreign countries decreased from 1,642,067 to 525,149 tons, and in value from Rs. 15·62 *lakhs* to Rs. 7·17 *lakhs*. There were large decreases in the shipments to the United Kingdom, Ceylon, Java and Japan. Exports to India were more than double the exports in the previous year; indeed, as has been noted above in paragraph 113, India absorbed 80 *per cent.* of the total export, which is the most remarkable feature of the year's rice trade.

The year under report was, like the previous year, one of control. In April the Food Commissioner's control scheme was showing a tendency to break down because of the rise in the price of paddy. The rice maxima were based on a paddy rice of Rs. 124 and in April paddy transactions were being reported at Rs. 150 and even higher. The control scheme was therefore revised on the following lines:—Paddy which had hitherto been uncontrolled was, by notification under the Defence of India Rules, made subject to a maximum price of Rs. 150 per 100 baskets delivered at the mills, equivalent to a "Big Mills Specials" price of Rs. 385 per 100 baskets, and at the same time a much stricter system of licensing importers was introduced at the various Indian ports. From May on the upward tendency of prices was checked by the new provisions, but with the signing of Peace in July a rumour that control was about to be removed sent prices up again and paddy was hard to obtain. In August a notification was issued which put rice on the same footing as paddy and rendered it liable to be

commandeered, if necessary. The result was an immediate drop in the paddy price to the parity figure of Rs. 150 and the renewal of supplies. Up to that time the heaviest demand from India had been from Bombay, but extensive damage to crops in Bengal rendered necessary immediate and large shipments to Calcutta and Chittagong and for the next two months Bengal was flooded with rice. In November and December stocks were being withheld in the hope of an early raising of the control and the position was rendered more difficult by the knowlege that the new crop was a short one and in particular districts even a failure. From January 1920 a new control scheme came into force. This new scheme recognised that paddy was far above the nominal parity of Rs. 150 and the revised maximum prices were based on a paddy price of Rs. 180. It provided that export of rice would be permitted only on a license granted by the Rice Commissioner and only to such countries as had received an allotment from the Government of India. An entirely new departure was the arrangement by which the Rice Commissioner undertook to supply rationed countries with rice f.o.b. Burma ports and himself obtained the supplies by the issue of tender calls.

The high rice maximum based on a paddy price of Rs. 180 proved a strong attraction and paddy flowed abnormally freely into the ports Up to the end of March it was calculated that 75 per cent. of the exportable surplus was already held in the ports.

Rice bran had a very prosperous year, the total exports advancing from 38,511 tons, valued at Rs. 3·22 *lakhs*, to 218,917 tons, valued at Rs. 1·05 *lakhs*. Practically the whole amount was taken by the United Kingdom and the Straits Settlements in a proportion of, roughly, three to one.

Exports of other Commodities.

118. Exports of teak from Rangoon showed a considerable rise from 104,911 to 150,786 cubic tons, the highest figure ever recorded. The value rose from Rs. 1·56 *lakhs* to Rs. 2·31 *lakhs*. There was an increase of 62 *per cent.* in the foreign trade, the bulk being shipped to the United Kingdom. Export to Bombay, Madras and Sind showed greater activity, but the shipments to Bengal suffered a slight decrease. There was a revival in the export trade of Moulmein. Exports of other wood to foreign countries were insignificant, but shipments to India increased. Exports of mineral oil exceeded last year's record figure, and rose to nearly 162 million gallons. The value, however, fell from Rs. 5·92 *lakhs* to Rs. 5·91 lakhs Exports of kerosene to foreign countries were as usual unimportant. There was a decline of 11½ million gallons in the Indian trade, which was, however, normal, the previous year's figures having been inflated by the shipment of heavy stocks held in Rangoon. Exports of benzene and allied

motor spirit increased by 60 *per cent.* both in volume and in value. There was a large increase both in the foreign and the Indian shipments, the former of which went principally to the United Kingdom.

Foreign exports of paraffin-wax advanced by 9 *per cent.* in volume and 8 *per cent.* in value. Shipments to the United Kingdom increased by 16 *per cent.* in quantity and 12 *per cent.* in value. This was due to an increase in the freight available, and the relaxation of restrictions on export from the United Kingdom, which led to an increased demand from British candle makers, who manufacture for export. The large increase in the exports to Egypt represents consignments ultimately destined for France or Italy, to which countries the opportunities for shipping direct were much restricted. The heavy fall in consignments to South Africa was due to the re-appearance of American competition, resulting from the removal of restrictions on the export of this commodity from the United States. An advantage in the rates of freight from Burma over those from America led to an increase in the wax shipped to China and Japan. Exports to India declined by 21 *per cent.* in volume and 20 *per cent.* in value. Exports of candles to foreign countries rose by 21 *per cent.* in volume and value, and there was an improvement of Rs. 3·71 *lakhs* in shipments to India.

The foreign trade in hides and skins appreciated by 76 *per cent.* From September 1919 an export duty of 15 *per cent.* was imposed, subject to a rebate of two-thirds in the case of new hides and skins delivered to a tanner in a British Possession or Protectorate, or a native state in India. Exports to India exhibited a sharp decline from Rs. 18·08 *lakhs* to Rs. 1·81 *lakhs.*

The expansion in cotton cultivation, stimulated by the high prices of recent years, resulted in an increase of foreign exports by 39 *per cent.* in volume and 16 *per cent* in value, of the total quantity exported 51 *per cent.* went to the United Kingdom and 48 *per cent.* to Japan. Exports to India declined considerably to about one-third of last year's figure. There was a revival in the exports of cotton-seed oil and oil-cake, which went chiefly to the United Kingdom : exports of the oil increased from 8,444 gallons to 131,525 gallons and of the cake from 22,964 cwts. to 109,933 cwts. There were no exports of cotton-seed to India.

Foreign exports of beans advanced by 30,472 tons and Rs. 20·37 *lakhs* to Rs. 109,254 tons, valued at Rs. 198·85 *lakhs.* The United Kingdom, the largest purchaser, took rather less, and France took practically nothing, but there were shipments to Belgium, Holland and Japan. Exports to India showed a considerable increase.

The total foreign exports of rubber increased by 19 *per cent.* to 774,473 lbs., the highest figure on record, but the average value per pound fell from Rs. 1-2-0 to Re. 0-15-1, and the value of the exports declined from Rs. 47 *lakhs* to Rs. 46·43 *lakhs.* The bulk, as usual, was taken by the United Kingdom.

The business in cutch was impeded by the high level of Indian exchange. The quantity exported fell by 7 *per cent.* but the value rose by 23 *per cent.* Shipments to the United Kingdom increased by one-fourth, and Holland took 3,565 lbs. Exports to America declined. Exports to India rose by Rs. 4·51 *lakhs* to Rs. 11·32 *lakhs.*

Exports of shellac to foreign countries increased from Rs. 24 *lakhs* to Rs. 2·93 *lakhs.* Shipments of stick-lac to India advanced from Rs. 10 36 *lakhs* to Rs. 32·30 *lakhs.* Exports of pig lead increased by 37 *per cent.* in quantity and 6 *per cent.* in value. The United Kingdom and Ceylon took respectively 3,054 tons and 6,284 tons. Shipments to Japan declined by 546 tons to 1,654 tons.

The quantity of jadestone exported rose by 607 cwts. to 3,370 cwts., but the value fell by Rs. 4 *lakhs* to Rs. 8·57 *lakhs.* As usual Hongkong took practically all.

Distribution of Rangoon Trade.

119. In 1913-14, the last complete year before the war, the United Kingdom's share in the foreign trade of Rangoon was 36·51 *per cent.* of the value of the whole. The figures for 1915-16 and subsequent years are 47·43, 44·40, 44·80, 36·93 and 43·80. Her share in the import trade rose from 48·78 *per cent* to 49 91 *per cent.* in the year of report, and her share in the export trade from 30·66 to 38·74 *per cent.* The share of the British Empire in the whole trade of Rangoon rose from 62·76 to 71·96 *per cent.* Ceylon and Egypt, after the mother country, showed the greatest increases, while the trade with the Straits Settlements and South Africa showed a decline. European countries showed a decrease from 8·94 to 4·70 *per cent.*, to which France and Italy were the chief contributors.

Asia's share declined from 21·72 to 13·96 *per cent.*, Japan falling from 16·94 to 11·21 *per cent.* and Java from 2·82 to ·87 *per cent.* The former decline occurred both in the import and export trade, but imports from Java increased from ·60 to 1·27 *per cent.* Outside these two countries the Asiatic trade was negligible, and the figures do not call for comment. There was a decline in the trade with Portuguese East Africa, but as noted in last year's report the African trade of Rangoon is insignificant.

Imports from the United States, to which the American trade is practically confined, increased from 8·54 to 16·61 *per cent.* and exports to that country from 2·54 to 3·05 *per cent.* America's share in the total trade advanced from 5·82 to 9 36 *per cent.*

The combined trade in private merchandise between Rangoon and India increased considerably from Rs. 31,33 *lakhs* to Rs. 42,22 *lakhs.* Trade with Bengal rose from Rs. 18,54 *lakhs* to Rs. 20,99 *lakhs,* with Bombay from Rs. 6,88 *lakhs* to Rs. 11,73 *lakhs,* and with Madras from Rs. 4,72 *lakhs* to Rs. 7,55 *lakhs.*

Subordinate Ports.

120. The combined share of the Subordinate Ports of Akyab, Bassein, Moulmein, Tavoy, Mergui, Victoria Point, Sandoway and Kyaukpyu was 13·83 *per cent.* of the total trade of the province, as compared with 12·92 *per cent.* in the preceding year. Bassein's share of the foreign trade rose from 1·22 to 6·28 *per cent.*, and Akyab's share in the total trade from 3·75 to 4·93 *per cent.* Other variations are unimportant.

Intra-Provincial Sea-borne Trade.

121. The interportal trade of the Province was, as usual, conducted mainly between Rangoon and the Tenasserim ports, and the value of the trade rose by 26 *per cent.* to Rs. 4,10 *lakhs.* Imports and exports showed a large increase at Akyab, and there was a rise of over Rs. 3 *lakhs* in the import trade of Kyaukpyu. Tavoy showed a falling off under both heads. Moulmein and Bassein reported a decrease of imports, and a slight increase of exports.

Transfrontier Trade: Total Trade.

122. The transfrontier trade between Burma and adjacent countries, such as China and Siam, is recorded with fair accuracy in the north and south of the province. But between the 23rd and 19th parallels of North Longitude the trade from China, Tongking and Siam passes through the Shan States and Karenni. There are two trade registration stations in the Northern and one in the Southern Shan States, but much of the trade is still omitted from the registers and some is reckoned twice over.

The total value of trade between Burma and China and Siam rose from Rs. 3,39 *lakhs* to Rs. 3,51 *lakhs.* The value of imports rose from Rs. 1,74 *lakhs* to Rs. 1,91 *lakhs* but exports showed a slight decline from Rs. 1,64 *lakhs* to Rs. 1,59 *lakhs.* The trade is grouped under the heads merchandise, treasure and timber. Under the first there was a rise from Rs. 2,04 *lakhs* to Rs. 2,49 *lakhs*, under the second a decrease from Rs. 12,62 *lakhs* to Rs. 12,12 *lakhs*, and under the third there was a decrease from Rs. 1,21 *lakhs* to Rs. ·89 *lakh.* No changes in taxes or tolls were made during the year and recording stations remained the same.

China.

123. In the trade with Western China imports declined from Rs. 1,32 *lakhs* to Rs. 1 29 *lakhs*, and exports from Rs. 1,42 *lakhs* to Rs. 1,24 *lakhs.* Imports of piece-goods declined from 1,283 maunds valued at Rs. 1·09 *lakhs* to 791 maunds, valued at Rs. 64,800. Imports of raw silk remained practically stationary in weight and value Imports of hides decreased from 7,333 maunds, valued at Rs. 2,27 *lakhs*, to 6,000 maunds, valued at Rs. 1,78 *lakhs.* Exports of raw cotton advanced from 12,612 maunds, valued at Rs. 6·98 *lakhs*, to 24,893 maunds, valued at

Rs. 12·54 *lakhs*. Exports of cotton twist and yarn of Indian manufacture showed an increase from 69,131 maunds, valued at Rs. 72·19 *lakhs*, to 73,099 maunds, valued at Rs. 80·88 *lakhs*. Exports of European piece-goods remained practically stationary at 4,171 maunds, but their value rose from Rs. 6·87 *lakhs* to Rs. 9·39 *lakhs*. Exports of rupees declined from Rs. 39·14 *lakhs* to Rs. 8 *lakhs* and of other coin from Rs. 2·40 *lakhs* Rs. 1·08 *lakhs*. Apart from the articles specifically mentioned above, the chief imports were treasure, in the form of rupees, tobacco, specially in the shape of cigarettes, and orpiment. The chief exports were petroleum, fish-paste, iron goods and jade.

Siam.

124. Trade with Northern Siam experienced a recovery, imports rising from Rs. 26·80 *lakhs* to Rs. 31·98 *lakhs*, and exports from Rs. 16·98 *lakhs* to Rs. 26·69 *lakhs*. But the trade here cannot be considered healthy, and Japanese articles, cotton, rugs, towels, shawls and clothing are supplanting Indian and European manufactures. The imports consist mainly of elephants and teak, and under both heads there are violent fluctuations. In the year under report the number of elephants imported rose from 24 to 34, and their value from Rs. 1·14 *lakhs* to Rs. 2·01 *lakhs*. The value of teak imported declined slightly from Rs. 12·62 *lakh* to Rs. 12·12 *lakhs*. Of exports apparel rose from Rs. ·82 *lakhs* to Rs. 1·06 *lakhs*, but the value of European twist and yarn declined from Rs. 3·78 *lakhs* to Rs. 3·55 *lakhs*. The most important increase was that from Rs. 2·41 *lakhs* to Rs. 4·24 *lakhs* under the head of European piece-goods. The increase of the import trade in elephants caused the value of rupees exported to rise from Rs. 5·21 *lakhs* to Rs. 10·35 *lakhs*.

The value of imports from Southern Siam rose from Rs. 15·77 *lakhs* to Rs. 30·44 *lakhs*, and of exports to that country from Rs. 5·10 *lakhs* to Rs. 7·99 *lakhs*. By far the most important article of import was silk, both raw and manufactured; the value of both increased from Rs. 66·08 *lakhs* to Rs. 73·85 *lakhs*. Teak, elephants and cattle were the chief remaining imports. Exports of silver rose from Rs. 3·28 *lakhs* to Rs. 3·46 *lakhs*: the item next in importance was dyeing materials, valued at Rs. 2·55 *lakhs*, which made their appearance for the first time in the year under report.

Trade with Unadministered Kachin Country.

125. There was a further decline in the trade with the unadministered Kachin country, imports declining from Rs. 2·45 *lakhs* to Rs. 1·74 *lakhs*, and exports from Rs. 2·74 *lakhs* to Rs. 1·89 *lakhs*. Silver was again the chief import and accounted for Rs. 1·53 *lakhs* of the total. Cattle, apparel and Indian twist and yarn were the principal exports.

Trade with the Shan States and Karenni.

126. Imports from the Northern Shan States decreased from Rs. 3·2 *lakhs* to Rs. 3·05 *lakhs*. The decline is partly accounted for by a fall of Rs. 10 *lakhs* under the head of treasure. Imports of lead increased slightly in weight, but declined in value. Apart from mineral produce the articles chiefly imported were pickled tea (Rs. 3·45 *lakhs*), tea (Rs. 32 *lakhs*), fruit and vegetables (Rs. 10 *lakhs*), rice (Rs. 6 *lakhs*), lac (Rs. 4·25 *lakhs*), hides (Rs. 3 *lakhs*), livestock (Rs. 2 *lakhs*) and gums and resins (Rs. 1·5 *lakhs*). In almost all these articles there was a rise, particularly under the heads of lac and fruits and vegetables, but livestock and gums and resins showed a decline. The total value of exports rose from Rs. 3·35 *lakhs* to Rs. 3·82 *lakhs*. The requirements of the mines are prominent under the heads of manufactured metal (Rs. 1·52 *lakhs* in the year under report), railway materials (Rs. 16·5 *lakhs*) and petroleum. In the previous year the total value of exports under these three heads had only just exceeded 1 crore of rupees, and the year of report saw an increase of more than 100 *per cent.* in these articles of commerce. The principal articles of export not intended for the mines consist of provisions, salt, clothing and cotton. The total value of the first-named commodity rose from Rs. 18·86 *lakhs* to Rs. 20·95 *lakhs*, the chief contributors being dried fish and miscellaneous provisions, each of which showed an increase of nearly a *lakh* of rupees Salt declined from Rs. 7·64 *lakhs* to Rs. 7 03 *lakhs*, and apparel from Rs. 2·97 *lakhs* to Rs 2·07 *lakhs*. Cotton goods fell from 76·68 *lakhs* to Rs. 59·03 *lakhs*. There was an increase of nearly one *lakh* under raw cotton, but Indian and European yarn together decreased by nearly $3\frac{1}{4}$ *lakhs*. English piece-goods declined from Rs. 57·09 *lakhs* to Rs. 42·01 *lakhs* and Indian piece-goods from Rs. 75,584 to Rs. 48,882.

The value of imports from the Southern Shan States rose from Rs. 84·04 *lakhs* to Rs. 98·38 *lakhs*. Trade with these States, unlike that with the Northern Shan States, owes practically nothing to the mining industry. The chief imports were fruit and vegetables (Rs. 20 *lakhs*), cigar wrappers (Rs. 20·69 *lakhs*), livestock (Rs. 13·5 *lakhs*), lac (Rs. 6·5 *lakhs*) and teak (6 *lakhs*). The import of fruit and vegetables, and the import of lac, showed a notable development, but the characteristic feature of the import trade during the last three years has been a regular and generally distributed increase. Exports showed an increase from Rs. 117·40 *lakhs* to Rs. 127·18 *lakhs*. The largest individual item is one of Rs. 35·18 *lakhs*, on account of European piece-goods, as against Rs. 25 82 *lakhs* in the preceding year. Petroleum rose from Rs. 4·05 *lakhs* to Rs. 4·36 *lakhs* in value though there was a slight decrease in its bulk. The value of other oils exported increased from Rs. 2·93 *lakhs* to Rs. 3·71 *lakhs*. Railway materials, exported for the construction of the Southern Shan States Railway,

increased in value from Rs. 13·78 *lakhs* to Rs. 27·10 *lakhs*. The chief decrease occurred under the head of liquors, from Rs. 6·78 *lakhs* to Rs. 1·64 *lakhs*. The statistics of trade with the Southern Shan States include some through trade with Tongking and Siam.

Trade with the Karenni States is wont to fluctuate at about the same level with no marked tendency to rise or fall. The principal imports are minerals, teak and treasure, and these three heads account for 24½ *lakhs* out of the total value of imports (Rs. 25·25 *lakhs* as against Rs. 23·53 *lakhs* in the previous year). The bulk of the exports consists of treasure and manufactured metals, and thus practically the whole trade is conducted by the large mining and timber companies. Exports declined from Rs. 13·91 *lakhs* to Rs. 12·33 *lakhs*. Rice increased from Rs. 575 to Rs. 34,053, but treasure, in the shape of rupees for the Mawchi Mining Company, declined from Rs. 5·63 *lakhs* to Rs. 4·30 *lakhs*.

Public Works.

Administrative and General.

127. The few administrative changes that took place in the Public Works Department have already been mentioned in paragraph 2. The total expenditure during the year rose from Rs. 1,22·87 *lakhs* to Rs. 1,46·83 *lakhs*. There was a large increase from Rs. 79·31 *lakhs* to Rs. 1,11·54 *lakhs* under the head of Provincial Civil Works, and the total expenditure has only once been exceeded during the last ten years. The survey of the resources of the Province with regard to the supply of power from its waterfalls, reservoirs and rivers was commenced in October 1919. A very useful tour of investigation of the possibilities of the falls on the Namtu, Zawgyi and Panlaung Rivers was made, and a new and promising power-site was discovered on the Zawgyi during this reconnaissance. In all 132 possible power-sites have been considered, of which 32 have been rejected as useless for industrial purposes.

(*i*) *Roads and Buildings.*

Communications.

128. The total length of metalled roads in the Province outside municipalities and notified areas increased from 1,972 miles to 2,191 miles, of which all but 121 were maintained by the Public Works Department. The length of unmetalled roads also increased from 10,570 miles to 10,895 miles, of which 3,233 miles were maintained by local authorities, and the rest by the Public Works Department. The total expenditure on Communications rose from Rs. 59·06 *lakhs* to Rs. 64·83 *lakhs*, of which Rs. 26·54 *lakhs* represents expenditure on original works and Rs. 38·29 *lakhs* expenditure on repairs. The year

was a very important one, as it marked the commencement of a new and settled policy regarding the improvement of the existing roads and the development of the Province's very backward communications. The report of the special officers deputed to enquire into the matter of improvements to the existing roads was completed. It was estimated that eight *crores* of rupees were necessary to this end, and preliminary estimates involving the expenditure of Rs. 1,63 *lakhs* received administrative sanction. Under the special officers' programme many of the unmetalled roads referred to above are in process of being metalled. The construction of new roads is being curtailed as much as demands will permit till the existing roads are put into proper condition. Special attention was paid to the erection of permanent bridges. If the lack of these in past years has been an inconvenience, the construction of bridges capable of carrying a ten-ton road roller has become a necessity if the more important roads are to be soled and metalled in accordance with the recommendations of the Roads Advisory Committee. Satisfactory progress was again made in many districts with the replacement of temporary bridges by permanent structures, the most important work being the completion of the steel bridge over the Pazundaung Creek at Hlègu, on the Rangoon-Pegu Road at a cost of Rs. 1·12 *lakhs*. Rupees 1·75 *lakhs* had been spent by the close of the year on the Hopin-Thayagôn Road. The metalling of the Tavoy-Yewaing Road was completed at a cost of Rs. 79,863, and the expenditure on metalling the Pagaye-Hinduchaung Road was brought up to a total of nearly two *lakhs* of rupees. The road from Kyaukhnyat to Papun was completed at a cost of Rs. 2·60 *lakhs*: it was made to serve the wolfram mines at Mawchi About half the work of metalling the Migyaungyè-Taungdwingyi Road was completed, and a start was made on the collection of soling stone and metal for the improvement of the Mônywa-Ye-u Road.

Buildings, Imperial and Provincial.

129. The total expenditure on Civil Buildings rose from Rs. 23·66 *lakhs* to Rs. 28·89 *lakhs*, of which Rs. 17·36 *lakhs* were spent on original works and Rs. 11·53 *lakhs* on repairs. There was practically no variation under the latter head between the figures for the year under report and its predecessor, but original works showed an increase of Rs. 5 *lakhs*. A combined post and telegraph office was completed at Myohaung in the Akyab District, and a post office with quarters for a postmaster was erected at Myitkyina. A start was made with the collection of materials for the new Agricultural College at Mandalay, where some difficulty was experienced in connexion with the foundations. The most important of the medical works commenced was the construction of a small lunatic asylum at Kokkaing, to relieve the acute congestion at present felt in the Rangoon

Lunatic Asylum. An outpatients' department was erected at Lashio Hospital, and a new female ward was erected at Einmè. The better housing of the Civil Police received considerable attention, and quarters were completed or in progress at a score of places.

Miscellaneous Public Improvements and Sanitary Works.

130. The expenditure on Miscellaneous Public Improvements rose from Rs. 12·27 *lakhs* to Rs. 13·06 *lakhs*, of which Rs. 8·43 *lakhs* were spent on original works and Rs. 4·63 *lakhs* on repairs. The 70-acre tank at Maymyo was practically completed, and the jail camp for convicts employed on the work was closed down. The drainage of the malarious swamps at Putao was completed, and Rs. 15,000 spent on the station roads there. The dredger "Frederic Fryer" continued to do useful work in reclaiming land at Dedayè, Kyonmangè and Wakèma. The lay-out of the three railway towns of Daga, Zayathla and Yonthalin was put in hand. The old screwpile jetty at Syriam was dismantled, and will be replaced by a stronger and more durable structure. The sea-jetty at Andrew Bay was completed, and a stone landing stage at Mindat, in the Tavoy District, was opened.

Experimental tube wells were successfully sunk at Tharrawaddy and Thônzè, and the distribution project was under disposal. One at Nyaunglebin proved a failure, as the water was not considered wholesome by the Chemical Examiner. Important estimates for complete water-supply schemes at Myingyan and Insein were submitted for sanction to the Local Government. Expenditure on the Pegu water-supply was unfortunately delayed by the difficulty of obtaining iron pipes. Proposals for sinking tube-wells at Thôngwa and Bassein were under disposal.

Military Works.

131. Military Works absorbed Rs. 6·38 *lakhs* as against Rs. 4·75 *lakhs*. Of the total, Rs. 3·30 *lakhs* represent original works and Rs. 3·08 *lakhs* repairs. Improvements were made in some of the married quarters in the British Infantry lines of the Rangoon Cantonment, and accommodation was provided for 60 followers. An armoury was built for the headquarters of the 18th Rangoon Battalion of the Indian Defence Force. The Rifle Range in the lines of the 1st/10th Gurkhas at Maymyo was converted into a gallery range of eight targets. Good progress was made with a scheme for sinking a tube-well and remodelling the water-distribution system in Mandalay Fort. Nearly a *lakh* and a half was incurred under the head "Accommodation for Indian Troops." Quarters were provided for the XXVth Mule Corps at Mandalay, and ration sheds were built at the Campbell and Prendergast lines in Rangoon. Electric fans and lights were installed and an operating room built in the Indian Troops Hospital, Mandalay.

(*ii*) *Railways and Tramways.*

Railways: Construction and Surveys.

132. The Railways of the Province are worked by the Burma Railways Company, Limited. The total length of open line stands at 1,605·83 miles, or ·85 over the mileage recorded last year, the slight increase being due to a retirement of the line between Boyagyi and Kyaikkatha which was opened in March 1920.

In November 1919, the Railway Board sanctioned a preliminary survey by State agency for a line on the metre gauge to connect India with Burma *vid* the Hukong Valley. The survey was in progress at the end of the year

The Pyinmana-Magwe line was surveyed by the Burma Railways Company in 1918 and the complete Project Report and estimate were forwarded to the Railway Board in September 1919. An officer was placed on special duty during the year to estimate the traffic prospects of the line and his note on the subject was forwarded to the Railway Board in March 1920.

A revised Project Report, with detailed estimates, for the Moulmein-Ye Railway, was prepared by the Burma Railways Company during the year.

The Ta-ha-palai-Namtu Railway, approximately 36 miles in length, and running from the Burma Railways line to the Burma Corporation's Mine at Namtu was surveyed by the Burma Railways Company and the Project Report, with the detailed estimates, was forwarded to the Railway Board in December 1919.

The Aungban-Heho Section of the Southern Shan States Railway line was nearing completion at the close of the year.

The application of Messrs. Wali Mahomed and Brothers, Rangoon, for the construction of a railway line from Kyangin to Petye on the branch line terms remained under the consideration of the Railway Board.

Accidents and Interruptions.

133. In the early morning of the 29th September 1919, owing to heavy rain, the line between Anisakan and Thondaung Stations on the Lashio branch was flooded, and the ballast washed away for a length of 600 feet. Through communication was not restored till the forenoon of October 1st. The very heavy downpour of the first few days of May 1920, which was general in its incidence, caused several breaches in the main line between Thazi and Samon, but through communication was restored within twenty-four hours. Serious damage was done by the same storm to the Myingyan branch, and a landslip occurred on the Southern Shan

States line from the same cause. The main line was flooded between Daiku and Paungdawthi on the 21st July 1920. The down line ballast was washed away, and recourse was had to single line working until noon on the 22nd On the same day, a flood on the Pegu-Moulmein branch delayed traffic, but no serious damage was reported.

There were several accidents from other causes. On the 20th September 1919 at about midnight ten small ballast waggons attached to a ballast train were capsized and derailed between Saye and Padu owing to the breaking of a spring, which caused some sleepers to fall out and foul the line Through communication was restored on the following afternoon. On the 8th of October 1919, a down mixed train ran over a piece of rail placed across the line between Tegyigon and Saunigyaung on the Henzada-Kyangin Section. Three Burman youths were convicted of the offence, and sentenced to four years' imprisonment. What was, perhaps, the most serious accident of the year occurred in the early hours of November 28th, 1919, when the midday express from Rangoon ran into the rear of the slow through passenger train as it was standing in Thazi Station on the main line. The rear brake-van of the slow train was completely smashed, and the next vehicle damaged. The accident was due to the failure of the cabin *jamadar* to put back the signals to danger after admitting the slow train, and he and the Assistant Station-master were prosecuted and convicted. Damage was done to the extent of Rs. 6,000. On the 7th December 1919, two vehicles were derailed and capsized on the afternoon train from Maymyo to Mandalay between the second and first reversing stations. Through running was resumed next morning. The breaking of a rail of a crossing led to the derailment and capsizing of an engine tender and nine other vehicles at Bèlin Station, on the main line, on the afternoon of January 9th, 1920. The cost of the damage was over Rs. 5,000. A collision occurred just after midnight on May 17th, 1920, at Kunè Road Station on the main line between two goods trains, one of which was already standing on the second line when the other was admitted on to the same road. Both engines were slightly damaged, as was some of the rolling stock of both trains. The Assistant Stationmaster and the *jamadar* responsible were prosecuted and convicted. There were three cases in which trains ran into bullock carts at level crossings. Of these the only accident which caused loss of life occurred at Tatkôn, on the main line at about 9 at night on the 28th of May 1920. The cartman died of his injuries. The accident was caused by the *jamadar* in charge of the gates giving signals to the Assistant Stationmaster to take off the signals before closing and locking the level crossing gates. The *jamadar* was prosecuted and convicted. None of the other accidents recorded was attended by injury of any kind to human beings.

Traffic and Finance.

134. The number of passengers carried on the whole system during the year rose from 28,267,349 to 33,168,210. Gross earnings rose from Rs. 2,93·55 *lakhs* to Rs. 3,29·30 *lakhs*; working expenses from Rs. 155·88 *lakhs* to Rs 1,86·13 *lakhs* and net earnings from Rs. 1,34·67 *lakhs* to Rs. 1,43·17 *lakhs*. On the main line gross earnings increased from Rs. 2,63·29 *lakhs* to Rs. 2,96·86 *lakhs*; working expenses from Rs. 1,40·07 *lakhs* to Rs. 1,63·67 *lakhs* and net earnings from Rs. 1,23·21 *lakhs* to Rs. 1,33·19 *lakhs*. The capital outlay from the beginning of operations rose from Rs. 17,75·15 *lakhs* to Rs. 17,80·56 *lakhs*. The train mileage run increased from 5,043,736 to 5,554,302, and the average earnings per mile per week from Rs. 375·51 to Rs. 423·40. The average earnings per train-mile increased from Rs. 5·22 to Rs. 5·34, and the average expenses from Rs. 2·78 to Rs. 2·95. The percentage of expenses to earnings rose from 53·20 to 55·13, and that of net receipts to capital outlay from 7·03 to 7·55. Among the chief items of expenditure were the construction of a new station building at Toungoo, and a new three-line crossing station at Madaunghla, on the Mu Valley Section, and the relaying of the line between Toungoo and Mandalay with 60-lb. rails.

The capital outlay on the Pegu-Moulmein Railway during the year was Rs. 74,480; this raised the total expenditure to date from Rs. 1,53·10 *lakhs* to Rs. 1,53·84 *lakhs*. Train mileage fell from 553,964 to 551,841, the average earnings per train mile also declined from Rs. 4·06 to Rs. 4·02, while expenses rose from Rs. 2·16 to Rs. 2·48. Gross earnings rose from Rs. 22·47 *lakhs* to Rs. 23·38 *lakhs*, and expenses from Rs. 11·94 *lakhs* to Rs. 14·40 *lakhs*. The percentage of expenses to gross earnings rose from Rs. 53·12 to Rs. 61·59, and the percentage of net receipts to capital declined from 6·38 to 5·84. The mean mileage worked was 121·33.

The total capital outlay on the Henzada-Kyangin Railway was reduced during the year from Rs. 65·11 *lakhs* to Rs. 64·70 *lakhs*, owing to an adjustment by exchange of stock between this and the main line. The train mileage showed a considerable increase from 86,151 to 127,990. Gross earnings rose from Rs. 2·98 *lakhs* to Rs. 3·76 *lakhs* and expenses from Rs. 2·34 *lakhs* to Rs. 2·75 *lakhs*. The rates of expenses to earnings declined from 78 49 to 73·35 *per cent.*, while that of net receipts to capital rose from 0·99 to 1·55 *per cent.* The mean mileage worked was, as in the previous year, 65·66.

An exchange of rolling stock between the Southern Shan States Railway and the main line during the year reduced the total capital outlay on the Thazi-Aungban Section from Rs. 1,53·78 *lakhs* to Rs. 1,52·56 *lakhs*, inclusive of Rs. 3·77 *lakhs* debitable to the Aungban-Heho Extension. The train mileage increased from 98,207 to 102,443; gross earnings rose from Rs. 4·81 *lakhs* to Rs. 5·29 *lakhs* and working

expenses from Rs. 4·53 *lakhs* to Rs. 5·29 *lakhs*; there was a loss of Rs. 238 on the year's working. The rates of expenses to gross earnings increased from 94·24 to 100·04 *per cent.* The mean mileage worked was 69·68. The Aungban-Heho Section was resurveyed, and an estimate for Rs. 16·27 *lakhs* submitted to the Railway Board, but not sanctioned. A revised estimate was submitted, and permission was given for the work to proceed pending final sanction.

The earthwork of the first 17 miles of the Pyinmana-Magwe Railway was completed, and the outlay up to the 31st March 1920 amounted to Rs. 1·64 *lakhs*. The Namtu Railway Connexion Survey and the Pyinmana-Magwe Railway Survey were both completed, and progress was made with the Moulmein-Panga Survey.

Tramways.

135. The number of passengers carried by tramways in Rangoon rose from 21,948,303 to 25,389,119. The running mileage was computed at 1,791,151, as against 1,544,840 in the preceding year. Receipts rose by Rs. 1·84 *lakhs* from Rs. 11·21 *lakhs* to Rs. 13·05 *lakhs*.

On the Mandalay tramways, though the mileage run declined slightly from 455,795 to 446,401, an increase in the number of passengers carried from 3,648,038 to 4,442,623 swelled the receipts from Rs. 2·88 *lakhs* to 3·57 *lakhs*.

The Mandalay-Madaya Light Railway, which had gone into liquidation in March 1919, continued to run during the winding up of the Company's affairs. The undertaking and all assets were purchased in January 1920 for Rs. 3·5 *lakhs* by the executors to the estate of the late manager, on behalf of the heirs. No formal agreement had been concluded by the close of the year between the Local Government and the new management.

(*iii*) *Canals.*

Navigation Canals.

136. The Pegu-Sittang Canal was maintained in good working order throughout the year. This was the first year that the Moyingyi Reservoir, completed in 1919, was in full working order for the supply of water to the canal in the dry months, and it was possible to keep the canal at a much higher level than usual, and navigable for large boats throughout the year. By means of temporary sluices it was also found possible to pass the water-hyacinth weed out of the canal with sufficient rapidity to prevent the formation of jams, and throughout the year the weed was not allowed to interfere with traffic to any considerable extent. The permanent sluices and locks worked well, and new canal gates were erected at Tawa Lock, and gave satisfaction. The gross revenue from the canal rose from Rs. 1·98 *lakhs* to Rs. 2·21 *lakhs*, and the total working expenses from Rs. 1·16 *lakhs* to Rs. 1·35 *lakhs*.

The net revenue from the Twante Canal, which was constructed solely for purposes of navigation, declined from Rs. 3·14 *lakhs* to

Rs. 3·07 *lakhs*, owing to inactivity in the paddy trade. A small portion left incomplete in the quarter mile was dredged at a cost of Rs. 13,803. The Shwetachaung Canal, between Mandalay and Madaya, is used both for navigation and irrigation. Special repairs were carried out during the year, to raise the embankment. On the abandoned Sittang-Kyaikto Canal only the maintenance of the Kyaikto Lock and the Supana Sluice was undertaken during the year. A new breach was caused by the action of the tide, and a new cross embankment was made to prevent tidal action reaching Kyaikto by way of the canal.

Irrigation.

Major Irrigation Works.

137. There are in the Province four irrigation works classed as "major," namely, the Mandalay, Shwebo, Môn and Ye-u Canal Systems. The total capital outlay on these at the end of the financial year rose from Rs. 2,20 *lakhs* to Rs. 2,24 *lakhs*, and the amount expended during the year fell from Rs. 4·65 *lakhs* to Rs. 41,728. The area irrigated or benefited increased from 301,895 acres to 327,160 acres. The gross revenue receipts fell from Rs. 17·98 *lakhs* to Rs. 16·51 *lakhs*, while working expenses increased from Rs. 6·79 *lakhs* to Rs. 8·44 *lakhs*. The net revenue declined from Rs. 11·27 *lakhs* to Rs. 8·06 *lakhs*, and the percentage of net revenue to capital outlay from 5·09 to 3·63.

The area irrigated by the Mandalay Canal increased from 60,932 to 63,843 acres, the improved prices of paddy having led to an extension of cultivation. The gross revenue fell from Rs. 4·68 *lakhs* to Rs. 4·37 *lakhs*, owing to the fact that the uncollected balance of the revenue demand at the end of 1917-18 was Rs. 1·46 *lakhs*, whereas at the close of the year 1918-19 it was only Rs. 56,084. Working expenses rose from Rs. 1·15 *lakhs* to Rs. 1·35 *lakhs*, and the net revenue fell from Rs. 3·52 *lakhs* to Rs. 3·02 *lakhs*.

The area irrigated by the Shwebo Canal rose from 148,034 to 150,494 acres. The latter figure includes 128 acres of onion crop, but the increase was mainly due to the high price of paddy, and to better command, owing to the water-courses being in a better state of repair. Gross revenue decreased from Rs. 8·77 *lakhs* to Rs. 8·02 *lakhs*: as in the case of the Mandalay Canal last year's figures were inflated by large collections of arrears. Working expenses increased from Rs. 3·45 *lakhs* and the net revenue declined from Rs. 5·32 *lakhs* to Rs. 4·20 *lakhs*.

The Môn Canals irrigated 62,537 acres as against 59,476. The increase is due to the low Irrawaddy floods, which permitted a large area of *tazè* paddy being sown. Gross receipts declined from Rs. 3·85 *lakhs* to Rs. 3·12 *lakhs*, but a balance of nearly Rs. 75,000 remained outstanding at the end of the year. Working expenses increased from Rs. 1·39 *lakhs* to Rs. 1·87 *lakhs*, and net revenue declined from Rs. 2·46 *lakhs* to Rs. 1·25 *lakhs*.

Progress was made with the construction of the distributaries to the newly opened Ye-u Canal. In spite of the poor supply of water from the Mu River in June and July the area irrigated rose from 33,453 acres to 50,286 acres. The gross receipts rose from Rs. 67,965 to Rs. 98,310, but working expenses increased from Rs. 70,264 to Rs. 1·41 *lakhs*, and the year closed with a deficit of Rs. 42,290.

Minor Irrigation Works.

138. Nearly all the irrigation works classed as "minor" lie in Upper Burma. Many miscellaneous repairs and improvements were carried out, of which the most important were special repairs to the Salin Canal which had been damaged by floods, special repairs to the Mingè Weir in the Kyauksè District, and surveys in connecion with the Panlaung River Improvement Scheme, and the remodelling of the Môn Canal System.

In the Mandalay District the area irrigated from the Shwetachaung Canal rose from 11,945 to 13,333 acres, owing to the fact that the area was less than usual subject to floods from the Irrawaddy. The revenue rose from Rs. 65,430 to Rs. 68,771. The area irrigated by the Mu Canal in the Shwebo District increased from 7,428 to 12,111 acres, owing to good local rainfall and the stimulus given to cultivation by the high prices prevailing. Revenue showed a corresponding rise from Rs. 12,089 to Rs. 17,758.

The areas irrigated by the Canal Systems taking off from the Panlaung and Zawgyi Rivers in the Kyauksè District declined from 148,570 acres to 139,204. The decrease was due to deficient supplies in the rivers. Revenue declined from Rs. 6·85 *lakhs* to Rs. 6·42 *lakhs*.

In the Minbu District the area irrigated by the Môn Canal was practically stationary, while that irrigated by the Salin Canals fell from 28,872 to 21,341 acres. This decrease was due to short supplies in the river, and in particular to the action of floods alluded to above. Revenue from the Môn Canals declined from Rs. 1·04 *lakh* to Rs 1 *lakh*, and revenue on account of the Salin Canals from Rs. 1·10 *lakh* to Rs. 74,626. The revenue from minor irrigation works in the same district decreased from Rs. 780 to Rs. 638, owing to deficient rainfall.

In the Myingyan District the area irrigated by the Kanna Tank increased from 1,306 to 2,218 acres, owing to better supplies of water, while local deficiency of rain reduced the area irrigated from the Pyapôn Tank. The Meiktila Lake suffered from shortage of water, and never reached its full supply level during the year. The area irrigated declined from 38,755 acres to 32,400. The Sinbyugyi and Nayagan Tanks alone in the Meiktila District received good supplies, and produced satisfactory crops: elsewhere the season was unfavourable.

As compared with the previous year the gross revenue from all minor irrigation works in Upper Burma rose from Rs. 12·39 *lakhs* to Rs. 13·46 *lakhs*, working expenses from Rs. 5·32 *lakhs* to Rs. 6·03 *lakhs* and net receipts from Rs. 7·07 *lakhs* to Rs. 7·43 *lakhs*.

CHAPTER V.

REVENUE AND FINANCE.

REFERENCES—

Report on the Land Revenue Administration of Burma during the year ended the 30th June 1920.

Administration Report of the Public Works Department, Burma (Irrigation), for the year 1919-20.

Report on the Maritime Trade and Customs Administration of Burma for the official year 1919-20.

Annual Statement of the Sea-borne Trade and Navigation of Burma with Foreign Countries and Indian Ports for the official year 1919-20, Part I, Foreign Trade.

Report on the Administration of the Excise Department in Burma during the year ended the 31st March 1920.

Report on the Administration of Salt Revenue in Burma during the year 1919.

Note on the Administration of the Stamp Revenue in Burma during the year 1919-20.

Note on the Working of the Income-tax Act, VII of 1918, in Burma for the year 1919-20.

Report on the Forest Administration of Burma for the year ended the 30th June 1920.

Report on the Working of the Rangoon Municipality for the year 1919-20.

Report on the Reclamation of Rangoon Town Lands for the year 1919-20.

Resolution reviewing the Reports on the working of Municipal Committees in Burma (except Rangoon) during the year 1919-20.

Annual Statement of the Sea-borne Trade and Navigation of British India with the British Empire and Foreign Countries, Volume II.

Statistical Abstract for British India, Volumes II and IV.

Provincial Settlement.

139. The receipts and expenditure of the Province, other than those pertaining to local authorities, are divided between the Imperial and Provincial Governments in accordance with the terms of what is known as the Provincial Settlement. The existing Provincial Settlement was drawn up in 1907, but its terms were modified in 1911, with a view to converting large fixed assignments, which the Province then received from Imperial Revenues, into shares of growing revenue. The original Provincial Settlement was described in the Report on the Administration of Burma for the year 1907-08, and the subsequent modifications were summarised in the Report on the Administration of Burma for the year 1911-12. In 1915-16, in view of the fact that the Settlement had proved less favourable to the Province than had been anticipated, an additional recurring assignment from Imperial to Provincial Revenues of Rs. 15·11 *lakhs* was sanctioned, and a progressive guarantee was given of a minimum total growing revenue advancing by Rs. 8 *lakhs* a year from Rs. 479·46 *lakhs* in 1911-12 up to Rs. 575·46 *lakhs* in 1923-24, and thereafter a minimum total revenue of the latter amount, exclusive of assignments. No modification was made in the year of report or in the three preceding years.

Gross Revenue and Expenditure.

140. The gross receipts for the Province in the year of report rose from Rs. 14,64·23 *lakhs* to Rs. 15,22·07 *lakhs*, and the gross expenditure from Rs. 9,31·83 *lakhs* to Rs. 9,94·25 *lakhs*. This increase was common to both Imperial and Provincial receipts, the former rising from Rs. 5,43·16 *lakhs* to Rs. 5,67·98 *lakhs*, and the latter from Rs. 6,48·56 *lakhs* to Rs. 6,65·67 *lakhs*. Receipts of District and District Cess Funds declined, however, from Rs. 69·89 *lakhs* to Rs. 57·97 *lakhs*. Receipts of other Funds rose from Rs. 95·44 *lakhs* to Rs. 1,05·73 *lakhs*, and of Municipalities from Rs. 1,07·18 *lakhs* to Rs. 1,13·02 *lakhs*. There was also a general increase in expenditure, Imperial expenditure rising from Rs. 65·75 *lakhs* to Rs. 67·08 *lakhs*, Provincial from Rs. 6,11·69 *lakhs* to Rs. 6,65·67 *lakhs*, that of other Local Funds from Rs. 92·68 *lakhs* to Rs. 1,00·68 *lakhs*, and that of Municipalities from Rs. 1,00·90 *lakhs* to Rs. 1,08·41 *lakhs*. The only decrease occurred under the head of District and District Cess Funds, whose expenditure fell from Rs. 60·81 *lakhs* to Rs. 52·41 *lakhs*. These figures include the transactions of the Rangoon Port Trust, the Akyab Port Fund, the Rangoon Municipality, the Rangoon Pilot Fund, and the Moulmein Municipality, though they do not bank with Government.

(a) *IMPERIAL REVENUE AND FINANCE.*

[*In this section are discussed sources of revenue or expenditure which are partly, as well as those which are wholly, Imperial.*]

Total Imperial Figures: Notable Variations.

141. The net increase of Rs. 24·82 *lakhs* in Imperial receipts was the result of a gross increase of Rs. 69·65 *lakhs* mainly under the heads "Stamps," "Excise," "Income-tax" and "Transfers between Imperial and Provincial," combined with a gross decrease of Rs. 44·83 *lakhs*, mainly under the heads "Land Revenue," "Salt," "Customs" and "Major Irrigation Works." The increase of Rs. 4·72 *lakhs* under "Stamps" occurred mainly under General stamps and Court-fee stamps, and is attributable to the phenomenal trade conditions following the signing of the Armistice. The main increase under "Excise" occurred in connection with License and Distillery fees, and fines and confiscations. The increase of Rs 49·57 *lakhs* under "Income-tax" is due to the levy of Excess Profits Duty, to the general prosperity of the Province, and improved assessment in Rangoon. The net increase under "Transfers between Imperial and Provincial" is due to there being smaller assignments from Imperial revenues for the Kuki operations, and larger assignments to Imperial revenues on account of Income-tax revision. The decrease under "Land Revenue" is due to the postponement of the

collection of a portion of the ordinary revenue due from Lower Burma districts, and the remission and suspension of a considerable amount of revenue on account of severe scarcity in the Amherst District. The decrease under "Salt" is due to smaller customs receipts owing to a reduction in the quality of imported salt. The decrease under "Customs" is mainly due to the fact that the bulk of the rice-crop, under the Rice Control Scheme, was exported to India, and paid no export duty. As has been already explained, the revenue from Major Irrigation Works was swollen in the previous year by large collections of arrears.

The net increase of Rs. 1·32 *lakhs* in Imperial Expenditure was the result of a gross increase of Rs. 6·05 *lakhs*, chiefly under "Military Works," "Major Irrigation Works" and "Interest on other obligations," and a gross decrease of Rs. 4·72 *lakhs*, of which three quarters occurred under "Capital outlay on Irrigation Works." The increase under "Military Works" is due to the construction of new lines for the 25th Mule Corps at Mandalay, and improvements to the British Infantry lines at Rangoon. The increase under "Major Irrigation Works" is due to special repairs to works in the Môn, Twante and Ye-u Canals. The decrease under capital outlay on "Irrigation Works" is due to the scarcity of labour and certain book adjustments in connection with the hire of the dredger "Campbell", which was received back from the Military Department.

Land Revenue.

142. The gross receipts under "Land Revenue" for the financial year declined from Rs. 5,14·28 *lakhs* to Rs. 4,72·03 *lakhs*. As explained in last year's report, the figures for 1918-19 were inflated by the realisation of collections postponed from the preceding year. Under the terms of the Provincial Settlement three-eighths of the receipts are allotted to Imperial, and the rest to Provincial, Funds. The amounts credited to each respectively declined in the year under report from Rs. 1,91·07 *lakhs* to Rs. 1,75·54 *lakhs*, and from Rs. 3,23·21 *lakhs* to Rs. 2,96·48 *lakhs*. Expenditure under this head is wholly debitable to Provincial Funds, and fell from Rs. 70·43 *lakhs* to Rs. 67 53 *lakhs*. This head includes receipts derived from the land-tax, or land revenue proper, which is dealt with in Chapter II of this Report, and various other items detailed below. Collections of land revenue pr per due for the year 1919-20 amounted to Rs. 3,02·48 *lakhs*, and arrears of the year 1918-19 collected during the year of report amounted to Rs. 1·28 *lakhs*, and the total collections for the year were thus Rs. 3,03·76 *lakhs*. The corresponding figures for the previous year were Rs. 2,99·60 *lakhs*, Rs. 8·58 *lakhs* and Rs. 3,08·18 *lakhs*.

Collections of capitation-tax in Lower Burma rose from Rs. 52·83 *lakhs* to Rs. 55·53 *lakhs*, and the number of persons assessed from

13,84,698 to 13,90,454 Remissions declined from Rs. 4·67 *lakhs* to Rs. 1·78 *lakhs*. The increase in collections is more apparent than real, as the figures include a sum of no less than Rs. 2·63 *lakhs* actually collected from the Akyab and Kyaukpyu Districts in the preceding year, but treated as an advance payment against the demand for 1919-20, owing to the total exemption accorded to these two districts in 1918-19. The true increase in current collections was only Rs. 9,332. Excluding the Arakan Division, where no comparison is feasible between the figures for the two years, there was a decrease of 15,442 in the number of assessees, the Districts of Prome, Thatôn and Amherst being almost entirely responsible for the decline. The number of persons exempted decreased by 11,060 to 200,063. Collections of land rate in lieu of capitation-tax in certain towns increased from Rs. 1 *lakh* to Rs. 1·12 *lakhs*, owing to the assessment of persons who had hitherto paid income-tax, but became exempt from that impost on account of the raising of the minimum assessable income.

Collections of *thathameda* in Upper Burma increased slightly from Rs. 39·61 *lakhs* to Rs. 40·07 *lakhs*, and the number of households assessed rose by 12,218 to 885,519. Remissions increased from Rs. 58,555 to Rs. 60,882, and outstandings declined from Rs. 2,487 to Rs. 1,751. The number of exempted households declined from 113,686 to 110,983, which is almost identical with the figure for 1917-18. The decrease under "Village Headmen" is due to the policy of amalgamating charges wherever possible, and that under "Government Servants" to the return of discharged soldiers whose households had previously been exempted.

The demand of current fishery revenue increased from Rs. 33·48 *lakhs* to Rs. 36·66 *lakhs*. The increase occurred almost entirely under the head of "Rents of leased fisheries." High hopes based on two good seasons and the prospect of good prices for fish and fish-paste stimulated the bidding at the auctions of leased fisheries in most districts. The expectations of a good market proved to be justified, but the advantage derived therefrom was counteracted in many parts by unfavourable natural conditions and a comparatively poor catch. There was, accordingly, no great inducement to take out net licenses, and the lease rents were in some cases only paid with difficulty. Remissions of current revenue advanced from Rs. 28,230 to Rs 49,805, and the outstanding balance from Rs. 15,023 to Rs. 17,216. Collections of current revenue rose from Rs. 33·06 *lakhs* to Rs. 35·99 *lakhs*.

Collections of Miscellaneous land revenue rose from Rs. 44·96 *lakhs* to Rs. 47·52 *lakhs*. The chief decrease, of Rs. 1·60 *lakhs* occurred under the head of "Other minerals," and was due in the main to the slump in the wolfram industry in the Tavoy District, which recorded a decline of Rs. 1·85 *lakhs* under this head. On the other hand the head "Petroleum, rubies, jade and amber" showed an increase of over

Rs. 4 *lakhs*. The meaning of these figures is obscured by the fact that the accounts include the payments of large outstandings But there was a true annual increase of Rs. 1·08 *lakh* in the petroleum revenue from the Magwe District, though the actual output of oil declined. Rents of Town Lands not credited to Local Funds rose from Rs. 2·98 *lakhs* to Rs. 3 *lakhs*, and receipts under the Village Act from Rs. 2·12 *lakhs* to Rs. 2·18 *lakhs*. The chief contribution to the increase was a fine of Rs. 5,000 imposed on the inhabitants of Kinu for suppressing evidence in a case concerning the burning of Kinu Court-house.

Canal (Navigation and Irrigation) Revenue.

143. Paragraphs 90, 136, 137 and 138 of Chapter IV deal with the works for protection, navigation and irrigation of the Province and the revenue obtained from them in the year of report. Receipts and expenditure on "Major Works" are wholly Imperial; those on others are wholly Provincial. The only "Major Works" in the Province are the Mandalay, Shwebo, Môn and Ye-u Canals, which are Irrigation Works, and the Twante Canal, which is a Navigation Work.

Sources of Imperial Revenue other than the land.

144. Both receipts and expenditure under the head "Customs" are classified as "Imperial," and the former do not include the import duty on salt. The total collections for the year declined from Rs. 2,17·67 *lakhs* to Rs. 1,92·65 *lakhs*. The causes of this fluctuation have been explained in paragraphs 114—121 of this Report. The expenditure on "Customs" declined from Rs. 8·33 *lakhs* to Rs. 7·85 *lakhs*, and the net revenue under this head from Rs. 2,09·34 *lakhs* to Rs. 1,84·80 *lakhs*.

Customs.

145. Under the head "Opium" in the Imperial accounts there is no expenditure in Burma, and the receipts include only the payments made by the Government of Burma to the Government of India for the purchase of opium. All other receipts and expenditure in connection with the drug are included under the head "Excise." In the year of report the Government of Burma spent Rs. 5·67 *lakhs* on the purchase of opium as compared with Rs. 6·08 *lakhs* in the previous year.

Opium.

146. The period covered by the report extends over the year 1919 and the first three months of 1920, the Government of India having approved of the substitution of the financial year for the calendar year. No change was made in the law on the rate of duty, but modifications

Salt—General.

were made as to method of payment of duty by manufacturers who formed themselves into a Co-operative Society in Amherst District. Since the enactment of the Burma Salt Act, 1917, the process of replacement of the composition system by the system of direct taxation on issues has continued, and the collections by composition duty, Rs. 28,171, represent less than 1·4 per cent. of the total collections on Burma-made salt. The direct duty system has been introduced into Thatôn, Sandoway and Akyab, the three districts where the composition duty system survived, and the industry from the revenue point of view is on a sound footing. The total revenue from Burma-made salt and customs duty on imported salt was Rs. 34,41,147, the highest on record, to which Burma salt contributed Rs. 20,24,120, or 58·82 per cent. The output of Burma salt rose from 1,710,305 maunds to 2,010,171 or 17·50 per cent.; the increase in the preceding year was 44 per cent. The industry, however, needs improvement in methods of manufacture and reduced cost of production and transport if it is to meet the competition from outside which was serious before the war and has again become serious both as regards price and quality. Prices fell during the year under report as the result of increased imports. As the rate of duty for Burma is not likely to be changed, the industry must rely on its own resources, but Government has sanctioned the establishment of an experimental salt-boiling factory together with a small laboratory and is continuing the experiment in solar evaporation at Panga for a second year, the result of the first year's test being inconclusive. If successful this experiment would solve the fuel supply difficulty. The construction of the Moulmein-Ye Railway will, it is believed, materially assist salt-boilers in the Amherst District which is the industry's chief centre. The conservatism of the salt boiler is a hindrance to improvement, but may give way before stern competition and the lessons learnt from the experiments carried on at Government expense. The cost of the establishment rose from Rs. 64,902 to Rs. 91,986 in consequence of increased supervision and of charges consequent on larger output.

Supplies of Salt.

147. The total estimated consumption in 1919 was a record, 101,111 tons, (2,752,232 maunds), or per head 18·69 pounds, as against 97,625 tons,(2,657,575 maunds), and 18·05 pounds in the previous year. At the close of the year stocks were 34,326 tons as against 10,618 at the close of 1918. This increased consumption coincided with a general rise in retail prices, although wholesale prices fell as the result of imports from England, Port Said and Spain. The average wholesale price per maund of imported salt was Rs. 4-6-6 as compared with Rs. 4-8-5 in 1918 and and Rs. 3-15-2 in 1917. The average wholesale price of Burma-made salt per maund was Rs. 2-12-7 as compared with Rs. 3-0-1 in 1918 and Rs. 2-13-0 in 1917. Retail prices, which do not distinguish between

foreign and Burma-made salt, averaged Rs. 4-15-1 as compared with Rs. 4-12-4 in 1918 and Rs. 4-7-3 in 1917.

The number of licenses in the composition duty districts fell from 1,042 to 1,034 the output being 57,643 maunds. In the direct duty districts the number rose from 434 to 489, and the output rose from 1,643,958 maunds to 1,952,528 maunds, the largest ever reported. The incidence of duty in the direct duty districts remained unaltered at Rs. 5-7-6 per one hundred viss, the equivalent of the duty on imported salt. In the composition duty districts it varied from Re. 0-4-0 in Sagaing to Rs. 1-4-10 in Pakôkku, the provincial average being Re. 0 7 11 as compared with Re. 0-8-10 in 1918.

Excise—General.

148. The principal features of the year were the increase in the consumption of imported alcoholic liquor, consequent on the cessation of hostilities, and the increase in the demand for licit country liquor of all descriptions. The widespread use of petrol lamps, which require to be lighted with methylated spirit, caused a large increase from 111 to 129 in the number of licenses for the vend of denatured spirit. Temperance propaganda were active in several districts, and many memorials urging the closure of all liquor shops were received by the Local Government. Co-operation between the Police and Excise Staffs was on the whole satisfactory, but no great improvement was observed in the assistance rendered by village headmen. The number of arrests for offences of all classes against the Excise and Opium Laws declined from 10,264 to 9,760, but convictions fell by only 150 to 8,120, and the percentage of convictions to arrests rose to the record figure of 80.

The gross receipts for the year increased from Rs. 96·95 *lakhs* to Rs. 1,03·80 *lakhs*. Revenue from alcoholic liquor rose from Rs. 53·59 *lakhs* to Rs. 62·98 *lakhs*, but the total receipts from opium fell from Rs. 42·47 *lakhs* to Rs. 39·58 *lakhs*, mainly owing to a revision of allowances throughout the province. The total expenditure on the Excise establishment rose by 7·16 *per cent.* from Rs. 12·41 *lakhs* to Rs. 13·30 *lakhs*. The increase is due to the entertainment of more subordinate officers in connection with the *Tari* Tree-Tax System, to the payment of special allowances to officers on low salary, and to the construction of a new opium shop at Wakèma, and of quarters for the Superintendent of Excise at Tavoy. The gross demand for the year was Rs. 1,09·86 *lakhs*, as against Rs. 1,03·12 *lakhs*, and the net demand Rs. 1,09·43 *lakhs*, as against Rs. 1,02·86 *lakhs*. Of the net demand Rs. 1,883 remained outstanding, but on the other hand Rs. 7,141 were collected in advance for the coming year, making the gross realisations Rs. 1,09·48 *lakhs*. The difference between this figure and the gross receipts of Rs. 1,03·80 *lakhs* represents the cost price of the issues of opium at Rs. 13 per *seer*.

Excise Opium.

149. The systematic revision of allowances, to which reference has been made in the preceding paragraph, resulted in a decrease of 2,512 *seers* in the quantity of opium issued to shops. The net gain on the issues of Excise opium declined by nearly Rs. 3 *lakhs* to Rs. 38·59 *lakhs* in consequence. The gross receipts from license fees amounted to Rs. 98,049, as against Rs. 1·04 *lakhs*, owing to an adjustment of license fees for shops at which a reduction in sales was effected.

Tavoy, Rangoon Town, Pyapôn and Myaungmya were the districts chiefly responsible for the reduction of issues to shops. The fall of 731 *seers* in the case of the first named was largely due to the exodus of Chinamen from the district in consequence of the slump in the wolfram industry. Increases in Hanthawaddy and Pegu Districts were ascribed to the influx of Chinamen from Tharrawaddy, where the campaign of reduction has lowered the issue by nearly 2,000 *seers* in the course of the last four years. The incidence of consumption per thousand of the population fell from 4·29 *seers* to 4·25 *seers*. Revision of daily allowances continued to be carried out, but it was observed that in certain cases too little discretion was used, and that to cut down the allowance of a well-to-do *bonâ fide* consumer beyond a reasonable limit is merely to invite him to satisfy his needs from illicit sources. The policy of Government is directed rather against the spurious consumer. Chinese Advisory Committees proved a failure and it was decided to abolish them. Seizures of contraband opium increased by 50 *per cent.* to 1,334 *seers*, but it is hoped that one of the commonest forms of smuggling, namely, the dropping of opium overboard from steamers on their way up the Rangoon River, will be effectually checked when the fast launches recently sanctioned for the use of the Customs Department are available. The phenomenal fall in the price of Chinese opium seems likely to lead to increased smuggling from the China side. On the other hand this fall in price lessens the temptations to Shans and Kachins to grow poppies inside the borders of Burma, and the opportunity has been taken to suppress all poppy cultivation in the Kachin Hill areas along the frontier. Hawking was generally reported to have decreased, but the fact that hawked opium has in most districts shown a tendency to fall. Suggests that illicit supplies are still fairly plentiful. District reports generally confirm the view that, while there was practically no decrease in the taste for opium among Chinamen, various causes have combined to reduce consumption by Burmans except where climatic and economic conditions appear to demand a prophylactic.

The normal wholesale price of excise opium to licensed vendors was, as before, Rs. 100 per *seer* throughout the Province, this rate being modified on a sliding scale dependent on the size of the allotments of opium made to individual vendors. Except in the case of one remote

shop the retail price to consumers remained at Re. 1-6-0 per tola of raw opium, and Re. 1-11-0 per tola of prepared opium. In 25 districts opium was sold in both forms, and in 7 in the raw state only. The number of licenses for retail vend remained at 124. License fees for the current year from shops fell from Rs. 98,670 to Rs. 95,350. Licensees' net profit declined from Rs. 150 to Rs. 143 *per mensem*.

The number of arrests and convictions under the Opium Act, for illicit dealings in opium rose from 1,995 to 2,329 and from 1,660 to 1,974 respectively. The largest increases in the seizure of opium were reported from Rangoon and Bhamo, and the most important seizure of the year was one of 16,338 tolas, made by the Excise Department in Rangoon. The allotment of secret service money was further reduced from Rs. 4,374 to Rs. 3,570, and expenditure declined from Rs. 2,556 to Rs. 1,447. Only fourteen out of twenty-three Superintendents appeared to have spent any of their allotment.

Excise Liquors.

150. The total quantity of liquors of all sorts imported into Burma rose from 331,863 to 510,546 gallons, but their value only rose from Rs. 28·62 *lakhs* to Rs. 30·20 *lakhs*. All items showed increases except brandy and whisky, which fell by 42 and 6 per cent. respectively, and denatured and rectified spirit, which showed slight decreases. Imports of ale, beer and porter rose from 169,358 to 311,260 gallons, of wines from 14,127 gallons to 21,840, and of potable spirit from 148,226 to 176,788 gallons. Of ale, beer and porter the United Kingdom and Japan supplied 185,054 and 112,127 gallons, as against 95,402 and 71,662 gallons, respectively, in the previous year. As usual, most of the whisky came from the United Kingdom, most of the brandy from France, and most of the rum from Java. The clearances for consumption in Burma of brandy, gin, rum and whisky amounted to 141,887 gallons against 100,685 in the previous year. The output of the Mandalay Brewery declined by over 138,000 gallons to 207,947 gallons, and the duty from Rs. 98,238 to Rs. 47,176. Owing to the lesser number of British troops in the Province the demand slackened, and there was also an increase in the amount of foreign imports.

Burma foreign spirit, that is, liquor manufactured in the Province in imitation of imported liquors, was manufactured at two distilleries, in Mandalay and Moulmein. The quantity of Burma foreign spirit (London-proof) issued on payment of the full duty of Rs. 11-4-0 per gallon showed a slight increase from 18,600 gallons to 18,695, but the quantity issued to troops and Military Police at the privileged rate of Rs. 3-8-3 per gallon declined from 17,368 to 16,501 gallons, and the total duty from Rs. 2·73 *lakhs* to Rs. 2·70 *lakhs*. The falling-off in the issue to troops is explained by the fact that in 1918-19 large deliveries were made to the troops engaged in the Kuki operations, and

these were not repeated in the year of report. The number of wholesale licenses for the vend of foreign liquors, including imported liquor and local liquor excised at tariff rates, increased by 1 to 92. The number of licenses for the retail vend of foreign alcoholic liquor in public houses increased from 156 to 168, while that of special licenses in hotels, railway refreshment rooms and similar establishments rose from 157 to 160. License fees for the vend of beer decreased by 8·40 *per cent.* to Rs. 14,338, and those for the vend of other foreign liquor rose 18·80 *per cent.* to Rs. 5·03 *lakhs*. The fall in the former is explained by the fact that a bottle of beer cost at least twice as much as it did before the war, and the rise in the latter to keen competition.

The system of supply of country spirit to licensees was, as in previous years, the "Contract Distillery" system. Only two distilleries were at work, in Moulmein and Mandalay. The distilleries price varied from Rs. 1-8-0 to Rs. 2-12-0, and the duty varied from Rs. 1-4-0 in Bhamo to Rs. 9-1-0 in Rangoon per London-proof gallon. There was a slight increase in the sales of the higher strengths of spirit and a corresponding decrease in the sales of the lower. Licenses for the vend of country spirit increased from 154 to 160, and license fees from Rs. 3 *lakhs* to Rs. 3·65 *lakhs*. There were 6 outstills, as against 10, and 12 shops licensed for the vend of outstill spirit as against 21. Receipts fell by over Rs. 5,000, and the percentage of these receipts to the total receipts from country spirit declined from 2·1 to 1·2.

The Madras tree-tax system of excising *tari* was introduced into five more districts, Ma-ubin, Toungoo, Thatôn, Amherst and Yamèthin, and is now in force in twelve. It was not possible to draw any definite conclusion as to the success of the experiment either from the financial standpoint or as a factor in reducing crime. The existence of *dhani* groves in the coastal districts introduces a disturbing element which is absent in Madras, and the apparent increase in revenue was to a large extent set off by the enhanced cost of the additional establishment entailed by the system. It was decided to abandon the experiment in the Amherst District and not to extend it for the present to any district in which *dhani* groves are numerous. As in the previous year the tax on cocoanut palms was three rupees for half year per tree, on palmyra palms two rupees a year, on talipots eight rupees a year and on *dhani* palms eight annas a year. The revenue from *tari* tree-tax receipts increased from Rs. 47,721 to Rs. 74,865, and that from *tari* license fees was Rs. 9·72 *lakhs* as against Rs. 8·59 *lakhs*.

The issue of licenses for the vend of country fermented-liquor other than *tari* was continued in the same 15 districts in Lower Burma. In Upper Burma Meiktila was added to the five districts in which the

issue of such licenses was already in force. The number of licenses declined from 366 to 355, but the revenue derived from them advanced from Rs. 28·23 *lakhs* to Rs. 34·13 *lakhs*, the highest figure yet recorded. There was intense competition among the bidders, due to the anticipation that the end of the war would witness a considerable increase in the expenditure on this kind of drink. The Chemical Examiner for Customs and Excise, Calcutta, continued to test sample of this liquor, and of the yeast with which it is fermented: the results of analysis were in all cases satisfactory.

No change was made in the constitution of the Excise Advisory Committees during the year. Some of these displayed considerable interest in their duties. When any proposal has been made to open a new shop, local opinion has generally been consulted. The policy would appear to have worked satisfactorily.

Seizures of country spirit remained practically stationary at 2,131 gallons. Seizures of *tari* declined from 3,242 to 2,972, and of other country fermented liquor from 18,508 to 14,938. Seizures of foreign liquor were, as usual, small: those of spirit rose from 25 gallons to 38, and of fermented liquor fell from 107 to 55. The figures for offences in connection with country spirit were nearly identical with those recorded in 1918-19. There was a great improvement in the proportion of convictions to offences in connection with country fermented liquor, though the number of arrests fell by nearly 200, the convictions exceeded those of the previous year, and the percentage of convictions rose from 80 to 83. Convictions for drunkenness increased from 3,096 to 3,556. The number of cases reported in which intoxicating liquor was the cause of, or contributory to, crime increased from 393 to 692. It appears to be generally agreed that liquor is not an important primary cause of criminal conditions, though it is often consumed preparatory to the commission of a crime, as a stimulant to action already premeditated.

Ganja, Cocaine and Morphia.

151. The number of licenses issued for the possession of hemp drugs for veterinary purposes rose from 23 to 49, and the total revenue to Rs. 245. The total quantity seized declined roughly from 2¾ to 2 tons. The number of convictions decreased by 16·7 *per cent.* to 533. The demand for the drugs is at present confined to Indians, and Government has decided to proceed no further with the proposal to legalise their possession and sale. A few of the younger generation of Arakanese in Maungdaw are reported to have taken to *ganja* owing to the scarcity of other drugs and the high price of opium.

The number of pharmacists' licenses for the vend of cocaine rose from 45 to 48, and the receipts from Rs. 19 to Rs. 63. The amount seized fell from 52,595 to 14,697 grains, or a little over 2 lbs.

Convictions declined from 109 to 80. Most districts report that the taste for the drug has been almost eradicated owing to the restrictions on supply. Most of the drug continued to come from Japan.

Pharmacists' licenses for the vend of morphia fell from 51 to 47. Seizures rose to 7,013 grams, or a little over 1 lb., and convictions for illicit possession fell from 10 to 2.

Stamps.

152. There were no changes in the law relating to court-fees or stamps, but remission of stamp duty was ordered in two classes of cases, *viz.* (1) bonds required to be executed by persons selected for State technical scholarships; (2) instruments in the nature of a conveyance by Government of any forest produce in a Government Forest. The Treasury Officer, Tavoy, was empowered to affix and impress labels under rule 9, Indian Stamp Rules, 1914.

Gross receipts in the year amounted to Rs. 44·22 lakhs, the highest figures ever recorded and an increase of Rs. 9,43,886 over the previous year. The main causes were the reaction from war conditions and reserve of trade and shipping, high prices of agricultural produce and a boom in real estate in Rangoon and Mandalay. Court-fee stamps have increased by Rs. 3½ lakhs and non-judicial by nearly Rs. 6 lakhs, of which Rangoon Town alone contributed nearly Rs. 3 lakhs.

Every district showed increases in impressed stamps and in the total sale. The new Arms Rules which came into operation on 1st January 1920 introduced a fresh source of income. Share transfer stamps showed a small falling off but cheque and receipt stamps increased by over Rs. 10,000 from Rs. 49,068 to Rs. 59,575.

Receipts on account of judicial stamps increased in all save nine districts and represent the tendency to increased litigation usually consequent on the sudden change in general conditions of business, either for improvement or the reverse. The increase cannot be regarded as permanent.

The number of licensed stamp vendors again fell from 2,117 to 2,042, for which the failure of the experiment of appointing village headmen as stamp vendors is largely responsible. Three licenses were cancelled, one for infringement of rules and two for criminal offences. Discount paid to vendors rose from Rs. 49,992 to Rs. 65,391, almost wholly the result of the increased sale of non-judicial stamps.

Cases of unstamped or insufficiently stamped instruments dealt with under section 35 rose from 766 to 905 and the duty and penalty realised from Rs. 7,750 to Rs. 10,245. Collectors' cases rose from 378 to 505 but fell in the amount realised from Rs. 8,681 to Rs. 8,207. Thirty-four cases, involving 55 accused, were instituted and 50 persons were convicted; there are increases of 3, 10 and 12 respectively. Fines imposed fell to Rs. 536 from Rs. 580 and the rewards disbursed rose to Rs. 1,469 from Rs. 1,047.

Enquiries into the value of estates rose from 408 to 499 but the amount of deficient court fees fell to Rs. 2,059 as against Rs. 4,810. No penalties were inflicted.

Discount and establishment charges amount to Rs. 77,959 (an increase of Rs. 14,033); refunds Rs. 40,128 (a decrease of Rs. 5,529), the total charges being Rs. 1,22,086 an increase of Rs. 9,978. The receipts amounted to Rs. 43,00,260 as compared with Rs. 33,66,382. The cost of general supervision (Rs. 25,952) and stamps supplied (Rs. 11,364) are not included in these figures.

Assessed Taxes.

153. During the year under report a new amending Act was passed, but was not brought into effect until the 1st April 1920. Some changes were made in the Rules, including power to the Collector to enter into an agreement for composition for a period of five years instead of for three. A new Income-tax Manual was in course of preparation containing directions under the new Act and embodying suggestions made by officers with administrative experience. The Collector of Income-tax, Rangoon, was empowered to assess Government servants and Railway employees in the Shan States, but assessment is not at present enforced in the case of other persons in the Shan States. The appointment of a wholetime Collector for Rangoon has been justified by a further increase in collections. Compliance by assessees with the obligation to send in returns of income under penalty of an assessment under section 18 (4) has increased, the preliminary hesitation due in part to the complicated nature of the form to be filled up having worn off; but a more simple form of return would be welcomed. A new system of assessment of Chetties has been introduced in Mandalay, a Committee of Chetties supplying the figures on which it is based. Twelve districts have used the services of the Chetty clerks. A special staff has been deputed from Madras in connection with the assessment of Nattukottai Chetties. Proposals for the appointment of special Chinese and Gujarati clerks have been submitted. The Headquarters Assistant, Tavoy, who was formerly Collector of Income-tax, Tavoy Town only, was notified as Collector for the whole district.

As a result of the exemption of incomes below Rs. 2,000 the number of assessees fell from 29,176 to 9,506. Total net collections rose from Rs. 64·88 lakhs to Rs. 82·71 lakhs; Rangoon collections increased by Rs. 19·34 lakhs the decrease in the districts being more than counter-balanced. The stationary nature of district collections (where the working of the Income-tax Act is but one of many duties) indicates the need for improvement in administration. The appointment of an expert Accountant in Rangoon and the phenomenal increase which followed, point to the results likely to ensue on the appointment of another expert to inspect district offices and advise Collectors.

The main sources of increase were taxes on income derived from business (Rs. 10·37 lakhs), collections under section 25 (Rs. 8·59 lakhs) and other arrears of previous year (Rs. 3·25 lakhs). Fifteen companies and one firm between them contributed Rs. 45·64 lakhs to the revenue. Income on securities increased only by Rs. 11,286, the one district which did not submit a blank return being Amherst; it is probable that although the rural Burman is not largely given to investment, his holding of securities is larger than the returns indicate. Tax on income derived from house property rose from Rs. 64,469 to Rs. 1,34,450 wholly in Rangoon, while Mandalay only collected Rs. 6,000. Remission and refunds in Tavoy indicate not merely the slump in the mining industry but double assessment in previous years on companies with head offices in Rangoon. The number of coercive processes fell considerably, pointing to more satisfactory assessment as well as the limitation of taxable income to Rs. 2,000 and the same applies to the objections and petitions preferred. Generally it would appear that the assessments are regarded as equitable.

Penalties under all three heads, show a decrease. In Bassein District action had to be taken against certain assessees who thought the tax would be collected by headmen as under the old Act: on learning that this was not the case they at once paid up the tax with the penalty. Payment of taxes direct into the Treasury by assessees has reduced district expenditure. The total expenditure for the Province on assessment and collection rose from Rs. 66,597 to Rs. 1,23,420 which was incurred almost wholly in Rangoon. Income-tax clerks are being sent in to Rangoon for training with, so far satisfactory results.

(b) REVENUE AND FINANCE OTHER THAN IMPERIAL.

Provincial Receipts and Expenditure.

154. The net increase of Rs. 28 80 *lakhs* in Provincial receipts was the result of a gross increase of Rs. 69·20 *lakhs*, and a gross decrease of Rs. 40·40 *lakhs*. The principal contributors to the gross increase were the heads "Forests" (Rs. 39·06 *lakhs*), "Income-tax" (Rs. 10·81 *lakhs*), "Stamps" (Rs. 4·72 *lakhs*) and "Excise" (Rs. 3·46 *lakhs*). As the revenue under all these heads, except the third, is divided between Imperial and Provincial Funds in accordance with the terms of the Provincial Settlement, the causes of increase have already been dealt with in the earlier portion of this Chapter. The case of forest revenue is dealt with below in a separate paragraph. Of the total decrease "Land Revenue," accounted for Rs. 26·73 *lakhs*, and "Transfers between Imperial and Provincial" for Rs. 11·65 *lakhs*.

Provincial Receipts.

These fluctuations have already been explained. A decrease of Rs. 1·66 *lakh* under "Police" was due to smaller recoveries being made on account of Punitive Police.

Provincial Expenditure.

155. The net increase of Rs. 53·98 *lakhs* in Provincial Expenditure was the result of a gross increase of Rs. 57·72 *lakhs* and a gross decrease of Rs. 3·74 *lakhs*. The heads under which expenditure mainly increased were "Civil Works" (Rs. 25·48 *lakhs*), "Forests" (Rs. 8·46 *lakhs*), "Police" (Rs. 3·42 *lakhs*) and "Courts of Law" (Rs. 2·96 *lakhs*). The increase under "Civil Works" was due to larger expenditure on Civil Buildings, Original Works and Communications, and to a larger share under establishment and tools and plant charges. The increase under "Police" was due to the creation of additional ranges, to the revision of salaries of Imperial Police Officers, and to the assumption by Government of full charges in connection with the Railway Police for crime and order. The rise under "Courts of Law" was due to the revision of salaries of the Indian Civil Service, to the grant of temporary allowances to meet the enhanced cost of living, and to increased diet and travelling expenses of witnesses. Decreases occurred chiefly under "Land Revenue" and "Ports and Pilotage." The falling off under the latter head was due to a smaller outlay on the purchase of stores owing to the fall in the price of coal.

Forests.

156. The Forest Department Report deals with the year ending on the 30th June 1920 and the figures of Revenue and Expenditure in it therefore differ from those compiled in the Finance Department. The gross revenue of the year ending 30th June 1920 rose from Rs. 129·48 *lakhs* to Rs. 165·67 *lakhs* approximately, Rs. 11½ *lakhs* of the increase being credited to the Tenasserim Circle and Rs. 20 *lakhs* to circles in Upper Burma. The increase was due in the main to lessees bringing forward logs held up previously for want of freight. The revenue derived from timber extracted by Government agency fell from Rs, 34·84 *lakhs* to Rs. 20·16 *lakhs* and for fuel from Rs. 7·98 *lakhs* to Rs. 5·22 *lakhs*; on the other hand revenue from timber extracted by consumers rose by about Rs. 27½ *lakhs* to Rs. 99·35 *lakhs*, owing to increased activity in the markets. Expenditure rose from Rs. 59·93 *lakhs* to Rs. 64·74 *lakhs*, the increase being chiefly under the head of establishment. The surplus of Revenue over Expenditure amounted to Rs. 102·32 *lakhs* or 62 *per cent.* of the gross revenue, as compared with Rs. 69·54 *lakhs* and 54 *per cent.* of the gross revenue in the previous year. The increase in net revenue was mainly due to the increased number of logs brought by lessees to measuring stations.

Local Funds.

District Cess Funds.

157. A District Cess Fund is maintained for local purposes in each of the 21 districts in Lower Burma, excluding Rangoon Town. No change took place in the number or constitution of these funds. Their aggregate receipts fell from Rs. 46·15 *lakhs* to Rs. 39·24 *lakhs*, mainly owing to decreases under the heads "Provincial Rates," "Civil Works in charge of Civil Officers" and "Education." "Provincial Rates" showed a decrease of Rs. 4·76 *lakhs* which occurred mainly in the Pegu and Irrawaddy Divisions and was due to the postponement of the Land Revenue collections with which the cess is collected. The decreases under "Civil Works in charge of Civil Officers" and "Education" were due to the receipt of smaller contributions from Provincial Funds. The only large counterbalancing increase was due of Rs. 1·39 *lakhs*, occurring under the head "Miscellaneous," this was due to larger contributions from Municipal and Local Funds and to larger receipts of bazaar stall rents, chiefly in the Hanthawaddy, Pegu, Prome and Myaungmya Districts.

The aggregate expenditure of these Funds declined by Rs. 8·11 *lakhs* from Rs. 44·46 *lakhs* to Rs. 36·35 *lakhs*. The chief decreases were under the heads "Civil Works in charge of Public Works Officers" (Rs. 8·04 *lakhs*), "Debt Accounts" (Rs. 1·34 *lakhs*), "Provincial Rates" (Rs. 49,569), and "Medical" (Rs. 30,913). The decline under the first head was due to smaller outlay in the Tavoy and Hanthawaddy Districts, and that under "Debt Accounts" to non-investment in Government loans. The decrease under Provincial Rates was due to lesser expenditure on commission on cess collections in certain districts of the Pegu and Irrawaddy Divisions. Disbursements under "Medical" reflected smaller grants to hospitals and dispensaries. The chief increases were Rs. 1·14 *lakh* under "Civil Works in charge of Civil Officers" and Rs. 1·11 *lakh* under "Miscellaneous." The former was due to the refund of unexpended contributions by the Mergui District Cess Fund. All the Funds were solvent at the end of the year, and their aggregate closing balance rose from Rs. 21·06 *lakhs* to Rs. 23·95 *lakhs*.

District Funds.

158. A District Fund is maintained for local purposes in each of the 16 districts in Upper Burma, excluding Putao. These funds are not endowed as the Lower Burma District Cess Funds are with a cess on land revenue, but derive their income from various sources, such as bazaar rents, slaughter-house licenses, ferries and contributions from Provincial Funds. Their aggregate receipts during the year fell from Rs. 23·73 *lakhs* to Rs. 18·73; a decrease of Rs. 5·51 *lakhs* under the head "Civil Works in charge of Civil Officers," due to diminished

contributions from Provincial Funds, more than accounts for the total net decrease. The largest increase, Rs. 31,049, occurred under the head of "Police" and was due to larger receipts of slaughter-house license fees and sale proceeds of unclaimed cattle.

The aggregate expenditure of these funds decreased from Rs. 16·34 *lakhs* to Rs. 16·05 *lakhs*. A decline of Rs. 68,178 out of the total gross decline of Rs. 80,788 occurred under Debt Accounts, from the same cause as operated in the case of the District Cess Funds. Nearly all other heads showed an increase. A rise of Rs. 18,172 under "Public Works in charge of Public Works Officers" was due to increased expenditure under that head in the Kyauksè, Yamèthin, Minbu, Ruby Mines and Magwe Districts. An increase of Rs. 16,047 under "Education" was due to larger expenditure on maintenance grants to Vernacular Schools. All District Funds were solvent at the end of the year and their aggregate closing balance rose from Rs. 10·27 *lakhs* to Rs. 12·94 *lakhs*.

Other Funds.

159. The other local funds in Burma comprise the Cantonment, Town, Port, Pilot, Educational Syndicate, Rangoon Police Reward, Boiler Inspection and Burma University Funds.

The number of Cantonment Funds was seven as in the previous year, namely the Rangoon, Mandalay, Meiktila, Shwebo, Thayetmyo, Maymyo and Bhamo Cantonment Funds. Their aggregate receipts fell from Rs. 2·35 *lakhs* to Rs. 1·86 *lakh*, and their total expenditure from Rs. 2·28 *lakhs* to Rs. 1·98 *lakh*. In Rangoon the income declined from Rs. 1·02 *lakh* to Rs. 71,362, there being a decrease under every head. There was a decrease of nearly Rs. 2,000 in expenditure. The decline in receipts at Mandalay was mainly owing to a reduction of Rs. 32,600 in the grant-in-aid allotted by the General Officer Commanding. Expenditure fell by Rs. 32,079 to Rs. 56,057, the decrease occurring under "Public Works" and "Public Gardens." The receipts and expenditure of the Meiktila Fund rose from Rs. 7,601 and Rs. 8,335 to Rs. 9,338 and Rs. 10,582 respectively. Receipts at Shwebo increased from Rs. 5,939 to Rs. 7,459, mainly under the head "Grants-in-aid," expenditure rose from Rs. 6,145 to Rs. 7,757, the increase occurring chiefly under "Public Works" and "Conservancy Establishment." At Thayetmyo an increase of Rs. 586 in receipts occurred under "Grants-in-aid" and "Public Works," while the head "Miscellaneous Refunds" accounted for a decrease of Rs. 1,533 in expenditure. The income of the Maymyo Cantonment Fund rose from Rs. 15,629 to Rs. 19,773, owing to an extra receipt of Rs. 5,098 under "Grants-in-aid." Expenditure increased by Rs. 2,396, mainly under "Conservancy establishment," "Petty establishment" and "Public Works." The receipts and expenditure of the Bhamo Fund rose from Rs. 9,840 and

Rs. 9,854 to Rs. 14,186 and Rs. 11,151 respectively. "Grants-in-aid" accounted for the increase under income, and "Public Works" for the enhanced expenditure. A ten *per cent.* working balance was maintained by all Cantonment Funds at the close of the year. The aggregate closing balance fell from Rs. 46,767 to Rs. 33,795.

The number of Town Funds was 21 against 22 in the previous year. The total receipts of these funds, excluding opening balances, fell from Rs. 9·74 *lakhs* to Rs. 8·64 *lakhs*. The decrease is mainly accounted for by the conversion of the Notified Areas of Zigôn and Nyaunglebin into Municipalities. The total disbursements also fell from Rs. 10·97 *lakhs* to Rs. 7·80 *lakhs* partly owing to the last mentioned cause, as also to decrease of disbursements principally in Maymyo (—Rs. 72,000), Kalaw (—Rs. 53,000), Pyawbwè (—Rs. 40,000) and Danubyu (—Rs. 19,000). Larger disbursements in the previous year were due in Maymyo to the investment of Rs. 1 *lakh* in War Bonds, in Kalaw to the expenditure of a Government contribution of Rs. 45,000 towards distribution of water-supply and in Pyawbwè to increased expenditure on public works. The expenditure of the year exceeded the receipts in the case of eight Town Funds against 12 in the previous year, and the aggregate closing balance rose from Rs. 3·44 *lakhs* to Rs. 3·88 *lakhs*. There were three cases of embezzlement of Town Fund money. The amounts embezzled were substantially made good in two cases.

Excluding the Rangoon Port Trust, there were as before six Port Funds, at Bassein, Moulmein, Akyab, Mergui, Tavoy and Kyaukpyu. Their total receipts and expenditure were Rs. 4·88 *lakhs* and Rs. 4·47 *lakhs*, as against Rs. 4·40 *lakhs* and Rs. 4·18 *lakhs* respectively in the previous year. Receipts increased in the case of all funds except Bassein and Tavoy, and expenditure rose in Bassein, Moulmein and Mergui. The aggregate closing balance increased from Rs. 2·64 *lakhs* to Rs. 3·05 *lakhs*. The debt due to Government by the Moulmein Port Fund declined from Rs. ·46 *lakh* to Rs. ·39 *lakh*, and by the Tavoy Port Fund from Rs. ·52 *lakh* to Rs. ·47 *lakh*. The finances of the Rangoon Port Trust have been dealt with in paragraph 74 above.

Excluding the Rangoon Pilot Fund, which has already been considered in paragraph 75 above, there were three Pilot Funds at Akyab, Moulmein and Bassein. Their receipts were derived chiefly from pilotage fees, and their expenditure consisted mainly of cost of maintenance of pilot vessels and payments to pilots. Their aggregate receipts increased from Rs. ·95 *lakh* to Rs. 1·52 *lakh*, and their expenditure from Rs. ·97 *lakh* to Rs 1·33 *lakh*. All the funds closed with balances in excess of the previous year, and appeared to be solvent.

The receipts of the Rangoon Police Reward Fund rose from Rs. 349 to Rs. 940 and the expenditure fellfrom Rs. 286 to Rs. 240. The receipts of the fund consisted of fines recovered from policemen,

and undisbursed rewards, and were utilized in rewarding good service on the part of policemen. The closing balance rose from Rs. 79 to Rs. 779.

The receipts of the Steam-boiler Inspection Fund fell from Rs. 1·03 *lakh* to Rs. ·94 *lakh*, and the expenditure from Rs. 1·68 *lakh* to Rs. ·96 *lakh*. Income was derived mainly from inspection fees, and expenditure chiefly represented establishment charges. The closing balance fell from Rs. ·24 *lakh* to Rs. ·22 *lakh*, exclusive of securities to the face value of Rs. 1·85 *lakh*.

The income of the Educational Syndicate Fund rose from Rs. 51,625 to Rs. 82,196, of which Rs 22,300 was contributed by Government and Rs. 500 by the Rangoon Municipality. The rest was derived from examination fees, interest on investments and sundry other receipts. The increased income was due to larger receipts under scholarship and prize funds. Expenditure rose from Rs. 52,711 to Rs. 80,306, and occurred chiefly under scholarship and prize funds. The closing balance rose from Rs. 15,472 to Rs 17,361.

The Burma University Fund opened with a balance of Rs. 3·78 *lakhs* and had an income of Rs. 56,774 during the year. The expenditure amounted to Rs. 14,240, leaving a balance of Rs. 4·20 *lakhs*.

Road and Education Cesses.

160. In Burma petty local public works are carried out and contributions to the cost of education are made by the District Cess and District Funds reported on in paragraphs 157 and 158. No special cesses for these purposes are levied in the Province.

Municipal Revenues.

161. The gross receipts of the year under report, including the opening balance of Rs. 2·16 *lakhs*, rose from Rs. 54·58 *lakhs* to Rs. 61·26 *lakhs*. Excluding the opening balance, advances and deposits, the total ordinary income was Rs. 54·87 *lakhs*, or Rs. 5·95 *lakhs* in excess of the income for the previous year. The gross expenditure increased by Rs. 76,831 to Rs. 53·19 *lakhs*. Excluding deposits and advances the ordinary expenditure was Rs. 47·90 *lakhs*, as against Rs. 43·23 *lakhs* in 1918-19. The loan charges for the year amounted to Rs. 10·79 *lakhs* and included the yearly instalment of Rs. 57,500 towards the repayment of the loan of Rs. 23 *lakhs* raised in 1887, Rs. 5·74 *lakhs* of interest, Rs. 4 40 *lakhs* of Sinking Fund, and Rs. 8,803 of management charges. Income and expenditure have been reviewed and an account of the loan position has been given in paragraph 70 of this Report.

Rangoon Municipality.

162. Excluding debt accounts amounting to Rs. 3·52 *lakhs* and opening balances amounting to Rs. 23·04 *lakhs*, the aggregate ordinary income of the 46 municipalities in the province (omitting Rangoon) fell from Rs. 50·57 *lakhs* in 1918-19 to Rs. 47·76 *lakhs* in the year of report. The income derived from municipal rates and taxes rose from Rs. 19·99 *lakhs* to Rs. 20·15 *lakhs* that derived from municipal property and powers apart from taxation from Rs 20·86 *lakhs* to Rs. 23·29 *lakhs*, including Rs. 18·72 *lakhs* realised from markets and slaughter-house fees; that from grants and contributions fell from Rs. 8·45 *lakhs* to Rs. 3·17 *lakhs*; that realised under Special Acts rose from Rs. ·67 *lakh* to Rs. ·71 *lakh* and that under "Extraordinary and Debt" rose from Rs. 1·98 *lakh* to Rs. 3·52 *lakhs*. The decrease of approximately Rs. 3 *lakhs* in the total ordinary income is mainly accounted for by the facts that in the previous year a contribution of Rs. 4,59,500 was made from Provincial Funds to the Mergui Municipality towards the cost of the acquisition and reclamation of the burnt-out area of Seikngè Quarter, and that in the year under report out of the Rs. 6 *lakhs* recurring grants for urban sanitary improvements the minor municipalities received only about Rs. 61,000 while contributions to the extent of Rs. 5,38,000 were made towards public works in Rangoon. Variations under other heads of revenue in individual municipalities were unimportant. Arrears of taxes outstanding at the close of the year fell from Rs. 38,553 to Rs. 20,294 including Rs. 3,054 in Toungoo, Rs. 3,831 in Akyab.

Other Municipalities.

The total ordinary expenditure of these minor municipalities rose from Rs. 42·59 *lakhs* to Rs. 50·32 *lakhs*. General administration and collection charges slightly decreased from Rs. 4·33 *lakhs* to Rs. 4·24 *lakhs*. Expenditure on "Public Health and Convenience" rose from Rs. 30·35 *lakhs* to Rs. 37·12 *lakhs*. The increase is mainly accounted for by an increase of over Rs. 1 *lakh* in capital expenditure on water works, Rs. 66,000 on hospitals and dispensaries and by the expenditure of Rs 3,63,564 by the Mergui Municipal Committee on the acquisition of land in the burnt-out area of Seikngè out of the Government contribution of Rs. 4,59,500 mentioned above. There was also an increase of expenditure under the head "Public Instruction" from Rs. 2·74 *lakhs* to Rs. 3·05 *lakhs*, towards which municipalities both in Lower and Upper Burma contributed. The decrease under the head "Extraordinary and Debt," from Rs. 4·10 *lakhs* to Rs. 2·70 *lakhs*, was chiefly due to a reduction of Rs. 82,000 under "Investment in Securities (other than to Sinking Funds)" and Rs. 55,400 under "Payment to Sinking Funds."

Three cases of embezzlement of Municipal Funds were discovered during the year, but the money lost was nearly fully recovered in two cases.

Other Funds.

163. Owing to the addition of a new fund during the year, there are now seven Educational Endowment Funds, namely the Jardine, the Maung On Gaing, the Renong, the Copleston, the U Po Hnit, the Hajji Yusuf Bymeah and the Orr Orr Memorial Funds. These funds do not bank with Government and their accounts do not therefore appear in the Government books. The accounts of the Official Assignee are similarly excluded.

Paper Currency.

164. The average gross circulation of notes in 1919-20 rose from Rs. 9,52·44 *lakhs* to Rs. 17,26·10 *lakhs*. At the end of April 1919, the gross circulation was Rs. 13,81·70 *lakhs*: it fell to a minimum of Rs. 12,92·27 *lakhs* on September 29th, 1919, and rose to a maximum of Rs. 28,16·15 *lakhs* on February 17th, 1920. Excluding from the gross circulation the value of notes of the Rs. 10,000 denomination we arrive at the active circulation: the latter on the last day of each month maintained an average of Rs. 16,17·23 *lakhs*, as compared with Rs. 8,77·06 *lakhs* in the preceding year. The increase was due to the continued use of notes in lieu of silver for trade purposes and the rise in the price of commodities. The percentage of the circulation of 10-rupee notes, as on the last day of the year, to all other kinds has been steadily falling for the last five years, and in the year of report declined sharply from 53·71 to 43·24. The percentage of 100-rupee notes to the total note circulation rose from 29·28 to 33·81: that of 1,000-rupee notes fell from 1·42 to ·95, while that of 5-rupee notes rose further from 3·31 to 6·55. The value of 1-rupee notes in circulation on March 31st, 1920, was Rs. 2,39·29 *lakhs* as against Rs. 1,42·91 *lakhs*, and that of Rs. 2-8-0 notes was Rs. 9·69 *lakhs* as against Rs. 8·88 *lakhs*. As in the previous year these two denominations supplied more than 11 *per cent.* of the total volume of currency. The total active circulation of notes showed an increase of Rs. 7,40·17 *lakhs* over the figures for the preceding year.

CHAPTER VI.

VITAL STATISTICS AND MEDICAL SERVICES.

REFERENCES—

Report on the Sanitary Administration of Burma for the year 1919.

Notes and Statistics on Hospitals and Dispensaries in Burma for the year 1919.

Report on the Working of the Burma Government Medical School, Rangoon, for the year 1919-20.

Report on the Working of the Pasteur Institute and Bacteriological Laboratory for the year ending 31st March 1920.

Note on the Lunatic Asylums in Burma for the year 1919.

Notes and Statistics on Vaccination in Burma for the year 1919-20.

Statistical Abstract for British India, Volume III.

Births and Deaths.

Area under Registration and total population.

165. The total area and population in Burma proper under registration remained the same as in 1918, but a small population of 95 was transferred from Thônzè (notified area) to Tharrawaddy District, thus reducing the urban population to 1,118,632, and increasing the rural population to 8,705,758. Registration was extended to the town of Kalaw, with a population of 2,767, in the Southern Shan States.

Number of Births and Deaths.

166. The total number of births registered was 293,672 or 30,636 less than in 1918. Towns returned 29,372 births, a decrease of 1,643; and rural areas 264,300, the deficiency being 28,993. Fewer births than deaths were registered in 12 districts. The excess of deaths was most marked in Rangoon, Mandalay and Kyauksè Districts. The provincial birth-rate was 29·89; that of Lower Burma 28·05; and of Upper Burma 32·91. The rural birth-rates for the Province, Lower and Upper Burma, respectively, were 30·36, 28·73, 32·91 and the urban birth-rates 26·26, 23·51 and 33·00.

The total number of deaths registered in the Province was 305,461, or 83,445 less than in 1918, of which Lower Burma returned 184,074 and Upper Burma 121,387, against 239,225 and 149, 681 in 1918. The death-rates for the Province, Lower and Upper Burma, respectively, were 31·09, 30·16 and 32·62. The rural death-rates for the corresponding areas were, respectively, 28·95, 27·85 and 30·68 and the urban death-rates 47·74, 45·60 and 52·99.

The provincial infantile mortality rate was 216·90, the rural mortality being 205·33 for the Province, 174·83 for Lower Burma and 246·95 for Upper Burma and the urban mortality being 320·99, 275·63 and 400·24 respectively.

The Societies for the Promotion of Infant Welfare at Rangoon, Mandalay and Moulmein Towns have reported satisfactory progress. The number of confinements attended by the Rangoon Society was 1,180, a decrease of 169 on the return for 1918. An additional midwife was employed by this Society, bringing the total to 9. Out of 406 births in Sagaing Municipality, 182 were confined in the Maternity Ward or attended by the Results-System Midwife. The societies at Thatôn and at Bogale (Pyapôn District) continued on the lines followed in previous years. In some towns Results-System Midwives have done excellent work, notably at Kyangin, Syriam, Taungdwingyi, Kyaukse and Lemyethna.

167. The registered mortality for different causes in 1919 is compared with the figures for 1918:—

Causes of Death.

Causes.	1919.	1918.
Cholera	13,260	4,269
Small-pox	3,917	750
Plague	4,397	8,840
Fevers	120,088	189,512
Dysentery and Diarrhoea	14,851	11,216
Respiratory Diseases	11,134	13,870
Suicide	181	214
Wounding or accident	1,829	1,894
Snake-bite or attacks by wild beasts	1,699	1,747
Rabies	180	98
All other causes	133,925	156,496
Total ...	305,461	388,906

The decrease from the total of 1918 was marked under the heads of "Plague," "Fevers" and "All Other Causes." There was however a large increase under Cholera, Small-pox and Dysentery and Diarrhoea.

Of the total number of deaths from Cholera, Lower Burma returned 9,327 and Upper Burma 3,933. There were 1,561 deaths from Cholera in towns of Lower Burma and 566 in towns of Upper Burma. The Cholera outbreak of 1919 was the most formidable since 1915, serious outbreaks previous to the latter year having been in the years 1908 and 1909—each with between 11,000 and 12,000 deaths.

Notification of the occurrence of outbreaks of cholera in their villages was in some districts neglected altogether or postponed by the headmen until opportunity for applying remedial measures had lapsed. Many of the towns still lack a protected water-supply.

There were 3,917 deaths from Small-pox in the Province, 1,411 deaths in Lower Burma and 2,506 in Upper Burma. Of the total, urban areas returned 2,110 deaths and rural areas 1,807. Nearly half the deaths in Lower Buuma was returned by Rangoon City, and nearly a third of those in Burma by Mandalay City.

There were 4,397 registered deaths from plague in the Province, 2,478 in Lower Burma and 1,919 in Upper Burma. During the year 71,450 doses of plague prophylactic were distributed to medical officers; and 63,439 inoculations were performed. The total number of rats reported as destroyed was 344,734, of which Rangoon Town claims 254,401.

The increase in mortality from "Fevers" in 1919 above the previous ten years' mean (excluding 1918) amounted to 39, 801 deaths, and is due to influenza. The fever death-rate for the Province was 12·22, for Lower Burma 12·78 and for Upper Burma 11·32. The rural rate was 12·59 against 20·01 in 1918 and the urban rate 9·36 against 13·72.

Quinine Products.

168. A total of 52, 253 packets of cinchona febrifuge tablets was manufactured at the Rangoon Central Jail—39,901 of five-grain tablets and 12,352 of one-grain. Forty thousand six hundred and thirty-seven packets of one-and five-grain tablets were sold in 1919, and a free distribution of 924 packets was made in certain malarious districts.

Emigration and Immigration.

169. The total number of immigrants returned at six ports of Burma *viz.* Akyab, Kyaukpyu, Rangoon, Moulmein, Tavoy and Mergui was 284,779 and of emigrants 219,087. The return for the Port of Bassein was blank. There were 24,857 more immigrants and 15,150 fewer emigrants in 1919 than in the previous year. Immigrants showed an increase in Akyab, Rangoon and Tavoy, and emigrants a decrease in Akyab, Rangoon, Moulmein, Tavoy and Mergui. Out of 200,646 emigrants who passed through Rangoon 176,715 were Indians.

Medical Relief.

Hospitals and Dispensaries.

170. Twelve institutions, the majority of which had previously been closed to supply military demands, were opened, and five (three of which were temporary dispensaries), were closed during the year; thus at the end of the year 269 hospitals and dispensaries

were affording medical relief as against 262 at the end of 1918. At the close of 1919, eleven civil hospitals and eight dispensaries remained closed for want of Sub-Assistant Surgeons to staff them.

Attendance and Treatment.

171. The number of patients treated in State Public, Local Fund and Private Aided (exclusive of Military Police and Railway) Institutions amounted to 1,807,261, of whom 80,026 were in-patients. There has been a slight decrease as compared with 1918 when the figures were swollen by the pandemic of influenza.

The most important causes for which patients sought in-door hospital relief were injuries, malarial fever, dysentery and diarrhoea, respiratory diseases, tuberculosis and venereal diseases. Dyspepsia, eye and skin diseases, ulcers, etc., made up the bulk of the out-patients. The more serious epidemic diseases such as plague, cholera and small-pox are not found in great number in hospitals. In the case of the first mentioned, there is little time to remove the patients to hospitals even if they are willing to go, and in all these there is a dread of being sent to a segregation hospital and placed in quarantine.

Enteric fever and ankylostomiasis are two diseases whose widespread incidence was ignored, but which are gradually becoming recognized as important causes of sickness and mortality. Venereal disease has also attracted a great deal of attention and improved methods of treatment have been introduced.

The death-rate for in-patients during 1919 was 7·2 as compared with 7·6 in 1918. In both these years it has been above the normal, due apparently to influenza and its sequelae. The Burmese, who form about 90 per cent. of the population, furnish only about 60 per cent. of the hospital attendance. This is an unsatisfactory state of affairs, but is explained to some extent by the fact that most of the Indians in the Province are town dwellers and it is from towns that the bulk of those attending hospitals, is drawn. The attendance of Burmese women continued to be satisfactory and increased during the year.

General.

172. The total expenditure on hospitals and dispensaries was Rs. 21,22,845 in 1919 as against Rs. 20,18,227 in 1918. This increase is due to the steady upward tendency of prices under the heads of bazaar medicines, diet and miscellaneous charges.

The financial position of most municipal hospitals is unsatisfactory. A modern hospital is an expensive necessity and few municipalities are in a position to devote the necessary funds to its upkeep. The problem of hospital finance is one that requires solution at an early date.

Owing to the scarcity of both establishment and materials, building schemes have been largely in abeyance, and there is much leeway to make

up. The next few years should see great activity in hospital construction. New hospitals or important additions are projected at Rangoon, Akyab, Myaungmya, Tavoy, Bassein, Pegu, Maymyo, Myitkyina, Bhamo and other places, and this by no means completes the list of requirements.

The medical establishment remained depleted throughout the year. Only 13 out of 41 sanctioned Indian Medical Service officers were working in the Province at the close of 1919. Similarly only four Military Assistant Surgeons out of 19. Their places were taken chiefly by Civil Assistant Surgeons and in a few instances by retired Indian Medical Service men and private practitioners. Out of a total of 408 Sub-Assistant Surgeons on the rolls 299 were in Burma, the remainder being either on military duty or sick leave.

The Nursing staff of the Province suffered in a similar way. A large number of European and Anglo-Indian Nurses were on military duty, and their places were taken by partly-trained Burmese and Karen Nurses. The need for extending the period of training of the latter and opening up new training centres has been recognized, and will, it is hoped, be given effect to shortly.

It will thus be seen that the work of the Department was carried on under grave disabilities and progress was impossible.

The enormous preventible infantile mortality in Burma, largely due to the ignorance and incompetence of the indigenous midwives, has been receiving attention and it is hoped the evil will gradually be remedied, but it will take time.

The Burma Government Medical School has continued to grow. There are now 137 students on the rolls The school has in fact far outgrown its facilities for teaching, and is in urgent need of reorganization and extension. This is the more necessary because Burma will have to depend on itself for its future supply of Sub-Assistant Surgeons. The number that can be trained in India has now almost reached a vanishing point. The expenditure on the school was Rs. 82,374 as compared with Rs. 75,469 in 1918.

The Pasteur Institute continues to increase in popularity. Four hundred and twenty-three cases were treated as compared with 379 the year before.

Lunatic Asylums.

173. The lunatic asylums at Rangoon and Minbu provided accommodation for 776 patients, while the average number of inmates rose from 816 to 828. There was much overcrowding in Rangoon, especially in the criminal section. As might be expected, the mortality rose from 7·84 to 9·66 *per cent*, and deaths from tuberculosis were double the average of the previous six years.

To remedy this the female section of the new lunatic asylum at Kokine is being pushed on with all speed. It has accommodation for 170 patients and should be ready for occupation early in 1921. When

the transfer takes place, the present congestion in the male section will be appreciably reduced.

The cost of the asylums rose from Rs. 1,89,768 to Rs. 2,47,157. The rise was chiefly due to the all-round enhanced prices of commodities and to the increased number of admissions.

Sanitation.

Principal Works and Expenditure.

174. A meeting of the Divisional Sanitary Board was held at Mergui on the 29th and 30th October 1919, to consider the question of the lay-out of the burnt-out area in Nauklè quarter and the erection of a sea wall to prevent erosion. Several recommendations were made as to (*a*) the preparation of an estimate of the whole cost of the reclamation and the building of a sea wall, (*b*) width of the Embankment road, and 6 others, and (*c*) the removal of the site of the bazaar to near the Embankment road.

Another meeting of the Board was held at Namtu (Northern Shan States) on 10th December 1919, at which questions relating to the sanitation of Namtu were discussed. The Board accepted the Site Committee's proposals as regards water-supply and conservancy of night-soil, and was strongly of opinion that Namtu should be constituted a municipality on an early date.

Most schemes already set on foot remained in abeyance during the year owing to the impossibility of getting the necessary materials for sinking tube wells and for constructing distributary pipe systems. The Sanitary Engineer investigated a proposal to extend the Thatôn water-supply, with promising results. He also found a source likely to afford a permanent supply to Paungdè Town, where tube wells have failed. It was decided to prepare plans for a water-supply to Tavoy Town from a reservoir to be situated in adjacent hills. The water of the great rain-water tank at Kyaiklat was found to be unusable, and proposals have been made to empty it and clear the bottom of decaying grass and roots. Distribution schemes are still pending at Mandalay City (tube wells), Pegu (upland reservoir), Nattalin and Minhla in Tharrawaddy District, Myingyan and Taungdwingyi (all tube wells). Progress was made with the survey in connection with the scheme to supply water to Toungoo Town from the Pathechaung Stream 12 miles distant. Tube wells sunk at Nyaunglebin and at Kungyangôn in Hanthawaddy District produced unpotable water.

The Municipal and Town Committees spent nearly Rs. 53·16 lakhs or about 40 per cent. of their income on civil sanitary works, Rs. 18·25 lakhs on water-supply, Rs. 5·58 lakhs on drainage and the balance on other sanitary works (including conservancy), while District Cess and District Funds contributed Rs. 5·14 lakhs out of a total income of Rs. 90·35 lakhs for expenditure on sanitary works.

Vaccination.

Establishment.

175. The strength of the vaccination establishment employed during the year was 42 District Superintendents of Vaccination (Civil Surgeons), 29 Sub-Assistant Surgeons, 41 Supervisors of Vaccination, 3 Head Vaccinators and 325 vaccinators. The staff was increased by one Sub-Assistant Surgeon in the notified area of Pyu. An additional Supervisor and three vaccinators were appointed in Thatôn and Toungoo districts, consequent on the extension of the Burma Prohibition of Inoculation and Licensing of Vaccinators Act to those districts. One temporary vaccinator for about 9½ months was entertained in Kawkareik town and a vaccinator each was appointed in Thatôn and Maymyo towns. The services of the five temporary vaccinators were dispensed with in Mandalay Municipality following the cessation of the epidemic of small-pox in that town. Twelve vaccinators were either removed or dismissed from the service during the year and one Supervisor of vaccination and one Head Vaccinator resigned the service.

Number of Operations.

176. The total number of persons vaccinated during the year amounted to 877,980 as compared with 591,632 in the year 1918-19. Of this number 838,038 were performed by the special staff, 789 by private agencies, 11,905 at various hospitals and dispensaries and 27,248 in jails.

The total number of operations performed by the special staff including those done by the "other agencies" was 839,079 as compared with 563,020 in 1918-19. Primary vaccinations totalled 484,853 or an increase of 61,301 over the outturn of the previous year. A great increase was recorded in the revaccination work. The total number of operations recorded during the year was 354,226 against 139,468 in 1918-19. Of the 29 districts which returned an increase in the number of primary operations Amherst headed the list with 8,333 excess operations, closely followed by Yamèthin (8,117), Northern Shan States (7,886), Thatôn (7,716), Upper Chindwin (7,600), Katha (5,996), Bassein (4,445), Chin Hills (3,224), Myaungmya (2,690) and Thayetmyo (2,606). Fifteen districts returned a decrease in primary vaccination work. A considerable falling off was noticed in Myingyan (2,798), Prome (2,206), Mergui (1,721) and Tharrawaddy (1,153). The increase in the outturn was chiefly due to the presence of epidemic of small-pox in many districts and also to the interest shown by the district authorities in the vaccination propaganda during the epidemic of small-pox.

Successful primary operations totalled 443,417 or an increase of 45,697 on that of 1918-19. Successful revaccinations totalled 186,407, more than double the number recorded for 1918-19. Rangoon, Bassein,

Mandalay, Sagaing, Pakôkku and Yamèthin showed large increase under revaccination. The percentage of success recorded in primary vaccination was 97·61 and in revaccination 66·91 against 97·83 and 65·27 respectively in 1918-19. Successful primary vaccinations amongst children below one year of age amounted to 114,374, one and under six years 226,478 and six years and above 102,506. The total number of persons vaccinated per 1,000 of population was 51·85 against 39·05 in 1918-19 and 34·56 in 1917-18. The average number of operations performed by each vaccinator was 2,627 as compared with 1,761 in the previous year.

The total number of operations performed in municipalities and notified areas during the year amounted to 129,421, of which 38,779 were primary and 90,642 revaccinations against 37,594 primary and 74,078 revaccinations in 1918-19. The percentage of success recorded in primary operations was 98·31 and in revaccination 61·42. Of the 29 towns which showed an increase in primary operations Letpadan, Nattalin, Bassein, Myaungmya, Kawkareik and Yamèthin were prominent and of those that returned a decrease Rangoon, Kyaiklat, Mandalay, Bhamo and Pyinmana figure very low. In 59 towns 21,611 infants were successfully vaccinated of whom 19,502 were registered as having been born in the towns in which they were vaccinated.

Eleven thousand nine hundred and five operations were done in various dispensaries during the year against 3,704 in 1918-19 Of this number 7,220 with 4,781 successes were returned as primary operations and 4,685 with 2,106 successes as revaccination. The percentage of success in primary vaccination was 84·62 and in revaccination 58·21. In the jails of Burma a total of 27,248 vaccinations were done during the year, 2,873 primary and 24,375 revaccination. Primary vaccination yielded a successful result of 77·06 per cent. and revaccination 58·07 per cent. Amongst the arrivals in the port of Rangoon 6,455 persons were vaccinated.

Out of 491,821 persons primarily vaccinated 54,528 or 11·09 per cent. were vaccinated by the Civil Surgeons and Health Officers as compared with 58,170 or 13·68 per cent. in the preceding year. Supervisors of vaccination verified 204,461 or 41·57 per cent. against 203,960 or 47·96 per cent. in the preceding year.

Expenditure.

177. The total expenditure during the year amounted to Rs. 2,48,648-13-2 which showed an increase on that of 1918-19 of Rs. 20,939-8-2. Rupees 1,50,743-7-1 was spent on the pay of the establishment, Rs. 67,243-11-9 on travelling allowances and Rs. 24,661-10-4 on contingencies. The average cost per case of successful vaccination was annas six and pies four only, the lowest on record for several years past.

Vaccine Depot, Meiktila.

178. The Vaccine Depôt at Meiktila was under the charge of Lieutenant-Colonel J. Entrican, I.M.S., till December 1919, when he was relieved by Captain A. J. Symes, I.M.S. Four hundred and eighty-four calves were inoculated during the year against 525 in 1918-19. The average yield per calf was 24·06 or over 2,000 doses of vaccine lymph. The number of doses issued during the year was 1,068,553 against 755,923 doses in 1918-19. The net cost of the Vaccine Depôt was Rs. 21,555-1-11 as compared with Rs. 20,396-5-11 in 1918-19. The cost of each dose of lymph was 3·87 pies against 4·73 pies in 1918-19. In the Rangoon Municipal Depôt, 59 calves were inoculated, yielding an average of 29·4 grammes each. Seed lymph was obtained from Bangalore and Meiktila. The quality of the lymph was good. The reported results gave 99·87 percentage of success.

CHAPTER VII.

INSTRUCTION.

REFERENCES—

Report on Public Instruction in Burma for the year 1919-20.
Statistical Abstract for British India, Volumes IV and V.

General System of Public Instruction.

For information on this subject reference should be made to paragraphs 178 to 205 of the *Report on the Administration of Burma* for the year 1917-18.

Education.

General Progress and Educational Measures.

179. The decline in the number of pupils under instruction, which was noted in last year's report, continued, but the pace slackened a little. The fall in the number of pupils in public institutions was practically confined to Primary Vernacular Schools, and in particular to the Lower Primary classes of these schools. Higher and Secondary education, and also Primary education in schools other than Vernacular schools, has advanced, the progress being most marked in Anglo-Vernacular Schools, in which the number of pupils on the rolls rose by 4,065. The decline is inevitable but (there is good ground for confidence) is merely a temporary set-back. In the years when expansion was the main ideal followed, something over 2,000 additional Primary Schools were entered in the Register, and the number of pupils in recognised Vernacular Schools was raised by something approaching a *lakh*. But the number of qualified teachers was far from sufficient to maintain these schools in even tolerable efficiency, and had qualified teachers been forthcoming, the funds available were wholly inadequate, and this although between the years 1912-13 and 1919-20 the total recorded expenditure from all sources on public education in Burma rose from about 53 to about 81 *lakhs* of rupees. A review of the whole situation has resulted in the acceptance by Government of a different policy. While every effort is made to maintain schools capable of proving fairly efficient, it has been recognized that in this Province the need of the hour in education is reorganization and improvement of standards in almost every branch of the public educational system. With better organization and the acceptance of standards not inferior to the standards accepted in the educationally more advanced Indian Provinces the expected increase in public funds available for education will again permit a new expansion, an expansion under conditions which, instead of

precluding, will guarantee efficiency. Accordingly efforts during the year under review have aimed, as in the previous year, at reorganization and the raising of standards.

The Rangoon University scheme was completed and submitted to the Government of India and the Secretary of State and has since been passed. The scheme includes a complete reorganization of Government, hereafter University, College under a new constitution. The College will cease to be a purely Government institution.

The Indian Educational Service was reorganized, and in the matter of salaries of its officers placed on a footing which compares not unfavourably with that of other Imperial Services. The reorganization of the Provincial Educational Service was under consideration, and the system of grading Subordinate Educational Service Officers, both Inspecting Officers and Schoolmasters, was simplified and improved. Two new Inspectors' Circles, Sagaing and Magwe, were instituted. The post of Deputy Director of Public Instruction was temporarily substituted for that of Assistant Director of Public Instruction, and the temporary post will in all probability be made permanent. A new post in the Provincial Educational Service was created, that of Personal Assistant to the Director.

Many changes, some of a far reaching character, were effected by the sanction given to the issue of the new Educational Rules and the new Grants-in-aid Code. These supersede all the portions of the Burma Education Code which treat of School organization and discipline and of Grants-in-aid in Anglo-Vernacular, European and Special Schools. With the issue of the Educational Calendar, which was in process of compilation during the year and has since been completed, all portions of the Burma Education Code affecting courses of study and examination and similar subjects in the same schools will also be superseded, and only those parts of the old Code which deal with Vernacular education will remain in force. After the passing of the Rangoon Municipal Bill and the Rural Self-Government Bill a fourth volume, treating exclusively of Vernacular education, will be issued, and the old Code will then be completely superseded.

A new Advisory Board, for European education, was constituted during the year, and the functions of both Advisory Boards were enlarged so as to include, amongst other things, the conduct of the two Middle School Examinations. The Text-Book Committee was also re-constituted.

The European curriculum was thoroughly revised, and the Anglo-Vernacular curriculum was also in certain parts revised and improved.

Important changes were effected in the Training school courses; the scheme for the institution of Monastic Training schools was put into final shape; and new rules, which raise the standard of qualification for teachers in all grades of schools, were promulgated.

Measures for the reorganization of the system of controlling and financing Vernacular education were considered during the year by all, and definitely pushed forward by the majority, of the Divisional School Boards. A change, which it is hoped will have important and beneficial consequences, was effected in Vernacular education by the inclusion of English as an optional subject in the Vernacular curriculum.

The rules for the administration of hostels attached to Government schools were in some points revised, and a complete scheme for the better management of these hostels was formulated and is under the consideration of Government.

The difficult question of religious instruction in schools under public and private management received much attention during the year. Practice was regulated in the former schools and a new policy was adopted in relation to the latter.

Owing to the philanthropic efforts of private agencies, supported by Government grants, a distinct advance has been made in the education of defectives. The three schools for the Blind were reorganized and extended and a school for the Deaf was opened.

Number of Schools and Scholars and Expenditure.

180. The number of all institutions, public and private fell from 27,100 to 26,806. Public institutions decreased in number from 9,238 to 8,417. Private institutions increased from 17,862 to 18,389. Pupils attending the former fell from 377,191 to 372,561—less than one and a quarter per cent. Pupils attending private schools increased from 195,717 to 202,645.

The total recorded expenditure on education during the year was Rs. 81,36,799 or Rs. 4,26,251 more than in 1918-19. The distribution under the several heads was as follows :—(The corresponding figures of the previous year are those in brackets). Provincial Funds (Rs. 32,08,216) Rs. 32,86,657 ; Local Funds (Rs. 10,48,467) Rs. 10,82,104 ; Municipal Funds (Rs. 3,55,510) Rs. 3,72,106 ; Fees (Rs. 23,56,267) Rs. 22,37,059 ; Other sources (Rs. 7,42,088) Rs. 11,58,873.

The fall in recorded fee receipts is due mainly to a decrease of nearly a *lakh* in boarding fees.

Direct expenditure on colleges and schools—which means recurring expenditure incurred in the maintenance of these institutions—amounted to Rs. 54,10,766 or Rs. 1,76,854 more than in the previous year. Indirect expenditure, including expenditure on direction and inspection, buildings and equipment, scholarships and miscellaneous charges, amounted to Rs. 27,26,033 or Rs. 2,49,397 more than in the previous year.

The cost of Direction and Inspection is borne entirely, and the cost of scholarships almost entirely, by public revenues. The cost of higher education and of secondary, primary and special schools respectively was

shared by tuition fees, public funds, and 'other sources' in the following proportions :—

	1918-19.			1919-20.		
	Fees.	Public Funds.	Other sources.	Fees.	Public Funds	Other sources.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Higher education ...	29	55	16	28	56	16
Secondary schools ...	36	57	7	35	53	12
Primary schools ...	19	70	11	14	73	13
Special schools ...	8	85	7	6	87	7

The average expenditure on education per head of population in 1919-20 was As. 10-8, of which As. 6-3 was from public funds. The figures for the previous year were As. 10-2, As. 6-1 being from public funds.

The average cost of education of each pupil was Rs. 14·5 as against Rs. 13·8 in 1918-19. There was an increase under Colleges (Rs. 305·7 against Rs. 295·4) and Lower Primary schools (Rs. 2·8 against Rs. 2·5). The figures are lower for Secondary schools (Rs. 27·5 against Rs. 27·7). Training schools (Rs. 298·07 against Rs. 320·5), and other Special schools (Rs. 13·5 against Rs. 16). The average cost of Upper Primary schools remained the same (Rs. 5·6).

Primary Education.

181. The total number of schools of all grades in which Primary education is imparted was in 1918-19 and 1919-20 as follows :—

		1918-19.	1919-20.	Actual increase or decrease.
Government	European	1	1	...
	Anglo-Vernacular	37	37	...
	Vernacular	39	10	− 29
	Total ...	77	48	− 29
District Cess (Vernacular)		18	40	+ 22
Municipal Board (Vernacular)		5	14	+ 9
	Total ...	23	54	+ 31
Private management.	European	31	31	...
	Anglo-Vernacular	142	154	+ 12
	Vernacular	8,447	7,589	−858
	Total ...	8,620	7,774	−846
	GRAND TOTAL ...	8,720	7,876	−844

Six Anglo-Vernacular Primary schools have been recognised on the understanding that they will in due course become Middle schools. The need for Anglo-Vernacular Primary schools has been greatly lessened by recent changes. These schools were hitherto valued chiefly for two reasons; first because in them pupils to whom it was not intended to impart a full Anglo-Vernacular education might nevertheless learn a certain amount of English which, though slight, would be useful to them afterwards; secondly because the rules regulating transfers from the Vernacular to the Anglo-Vernacular school and promotions from standard to standard in the Anglo-Vernacular school had the effect of adding several years to the normal school course of a pupil who passed from one class of school to the other. These restrictions have now been removed, and it is probable that the purposes of those who have hitherto sought recognition for Primary Anglo-Vernacular schools will be better and more economically served by the institution of English classes in Vernacular schools than by the institution of small Primary schools.

The reduction in the number of Government Vernacular schools and the increase in the number of Vernacular schools managed by local bodies indicate merely a transfer of schools from one authority to another.

The total number of pupils in Primary schools and Primary standards of Secondary schools of all kinds in the two years under comparison was as follows:—

		1918-19.	1919-20.	Actual increase or decrease.
European Schools	Boys	1,860	1,954	+ 94
	Girls	1,863	1,945	+ 82
	Total ...	3,723	3,899	+ 176
Anglo-Vernacular Schools.	Boys	14,278	16,632	+ 2,354
	Girls	3,553	4,276	+ 723
	Total ...	17,831	20,908	+ 3,077
Vernacular Schools.	Boys	213,113	204,564	− 8,549
	Girls	106,552	104,497	− 2,055
	Total ...	319,665	309,061	− 10,604
Total ...	Boys	229,251	223,150	− 6,101
	Girls	111,968	110,718	− 1,250
	GRAND TOTAL ...	341,219	333,868	− 7,351

The number of pupils receiving instruction in the Primary classes of European and Anglo-Vernacular schools has risen, in Anglo-Vernacular

schools very appreciably. The percentages of increase are roughly, in European schools 5 per cent. for boys and 4·4 for girls; in Anglo-Vernacular schools 16·5 for boys and 20 per cent. for girls.

The number of recognised Vernacular Schools, Primary and Secondary, was reduced by 856. In itself the reduction is not necessarily to be regretted. Roughly one Vernacular Primary school in every ten has ceased to be a recognised Primary school. Some of these schools have become Middle schools, some have been in effect amalgamated with other schools and the pupils of others which have ceased to exist have migrated to more efficient schools. The majority have not ceased to exist at all. They continue as private schools. Many of them were registered as 'B' schools on conditions which have not been fulfilled. Recognition has accordingly been withdrawn, and the funds which would otherwise have been spent on them to no purpose have been employed in helping more deserving schools to become more efficient.

The decline in the number of pupils is a different matter, and not to be disposed of so easily. The number of pupils who receive Primary education in recognised Vernacular Schools is less by 10,604 than the number who received the same education in 1918-19 and less by 18,535 than the number recorded for 1917-18. If, however, we set off the increase of pupils in Secondary classes of all schools and in the Primary classes of Anglo-Vernacular Schools, the net loss to be deducted during the year is little over six thousand.

The percentage of decline in Monastic schools—3,228 to 2,648—is nearly 18 as against about 5 (5,269 to 4,993) in Lay schools. The percentage of decline in pupils is 5 Monastic, and 2 Lay. These figures show that the retrogression in numbers is mainly due to the disregistration of inefficient Monastic schools.

It is further to be remembered that the figures have reference to pupils in recognised schools, not to pupils receiving education. If accurate figures were obtainable for private Vernacular schools, these figures would probably account for the loss in recognised schools of the great majority of the six thousand odd pupils. Disregistered Monastic schools at any rate go on as before. The figures available do not however show a rise in private schools corresponding to the fall in recognised schools; but the figures for Vernacular schools are not reliable.

The poverty and apathy of parents are still urged as contributing factors to what is termed "arrested expansion," but the main factor is the inevitable reaction from the reckless efforts made a few years ago in pursuance of a policy which aimed at increase in numbers with little regard for cost and even less regard for efficiency. The truth is that, if a very modest degree of efficiency is to be safeguarded and the Vernacular schoolmaster is to be assured a living wage, the funds now available not only do not allow of expansion in Vernacular education but in point of numbers enforce retrogression. Vernacular education is almost entirely

dependent on public funds, for except in the larger urban centres tuition fees cannot be reckoned on, and voluntary contributions from the people are beyond the control of the Education Department. The needs of Vernacular education are reorganisation, more funds and a large increase in the supply of qualified teachers. Without reorganisation the expansion facilitated by increased funds would probably be an expansion of inefficiency; with reorganisation and increase of funds the required supply of teachers might be obtained, but not otherwise.

Secondary Education.

132. The number of European Secondary Schools—11 for boys and 17 for girls—remained unchanged. Anglo-Vernacular Secondary Schools increased in number from 158 to 164. Vernacular Secondary Schools rose from 1,218 to 1,258. Details of attendance are given in the table below :—

Number of Pupils receiving Secondary Education, 1918-19 *and* 1919-20.

			1918-19	1919-20	Actual increase or decrease.
			Pupils.	Pupils.	
In European Schools for boys and girls.	Boys	High Stage	237	245	+ 8
		Middle Stage	809	817	+ 8
	Girls	High Stage	196	218	+ 22
		Middle Stage	667	658	− 9
In Anglo-Vernacular Schools for boys and girls.	Boys	High Stage	2,027	2,364	+ 337
		Middle Stage	9,539	9,964	+ 425
	Girls	High Stage	192	224	+ 32
		Middle Stage	1,076	1,270	+ 194
In Vernacular Schools for boys and girls	Boys	High Stage	197	206	+ 9
		Middle Stage	9,403	9,654	+ 251
	Girls	High Stage	4	2	− 2
		Middle Stage	1,455	1,590	+ 135
	Total	Boys	22,212	23,250	+1,038
		Girls	3,590	3,962	+372
	GRAND TOTAL		25,802	27,212	+1,410

It will be seen from the tables that there was a satisfactory increase in the number of pupils receiving Secondary education in Anglo-Vernacular Schools; the total number of pupils being 13,822 as against 12,834 of the previous year. The Primary classes in these schools have also much

increased in strength, and if the numbers in Primary Anglo-Vernacular Schools be taken into consideration, the total increase of pupils in Anglo-Vernacular Schools of all grades is 4,065.

The number of pupils receiving Secondary education in Vernacular Schools rose from 11,059 to 11,452, an increase of 393. If advantage be taken of the permission now granted to Vernacular Schools to teach English as an optional subject, further expansion in Vernacular Secondary education may be looked for, as not only may many pupils who would otherwise leave school at the conclusion of the primary stage be induced to continue by the prospect of learning some English, but others, now that transference from Vernacular to Anglo-Vernacular Schools has been made easier and rapid promotion in the Anglo-Vernacular School itself facilitated, may find in the Vernacular Middle School the most convenient approach to the higher standards of the Anglo-Vernacular School.

The institution of an Anglo-Vernacular Advisory Board in connection with the Anglo-Vernacular High School Examination was followed by the institution during the year of a similar Board for the European High School Examination. Later the designation of the Boards was changed and their functions extended. They are now styled, respectively, the Anglo-Vernacular and European Secondary School Advisory Boards, and their duties have been extended so as to cover the conduct of the Anglo-Vernacular and European Middle School Examinations and advise in all matters placed before them relating to studies, discipline and organisation in Anglo-Vernacular and European Schools.

Many changes in the curriculum of Anglo-Vernacular Schools and Schools for Europeans were recommended by the Advisory Boards during the year and received the sanction of Government either during or shortly after the close of the year. The European curriculum has been thoroughly revised. The Anglo-Vernacular curriculum has also undergone revision in several important respects: in particular, improvements have been introduced in the courses in English in both curricula, and an attempt has been made to promote the study of history in Secondary Schools. Hygiene, as an optional examination subject, has been discontinued in the High School course.

The constitution of the Text-Book Committee, which is chiefly concerned with studies in Secondary schools, was revised during the year, and the new arrangement received the sanction of Government a little after the close of the year. The activities of the Committee now extend to European as well as Anglo-Vernacular schools.

The schemes of examination have, with the revision of curricula, necessarily undergone modification. The Middle Examinations have been completely reorganised. They are now conducted by the Education Department with the assistance of the Advisory Boards concerned. Under the new system the co-operation of educationists other than officers of the Department is secured.

The results of the Examinations were as follows:—

Examination.	1918-19.		1919-20.		Percentage, 1918-19.	Percentage, 1919-20.
	Number presented.	Number passed.	Number presented.	Number passed.		
Anglo-Vernacular High School.	592	304	828	361	52	43
High School Examination for Europeans.	164	82	109	94	50	86
Vernacular High School Examination (9th Standard).	199	137	223	117	69	52
European Middle School	303	209	366	252	69	68
Anglo-Vernacular Middle School.	2,739	1,318	3,115	1,610	48	52
Vernacular 7th Standard	2,718	1,046	2,991	1,465	38	48

The Advisory Boards considered the feasibility of adopting a scheme for a Teachers' Provident Fund on lines laid down by the Government of India. The principle of the scheme was generally approved, but an essential condition of Government support is that managers themselves should contribute to the fund; and it was feared that managers would not be able to meet the additional demand made on their resources. Certain managers however have since recognised the need for the institution of a Provident Fund, and it is hoped that eventually the majority of managers will perceive the necessity of making a provision without which schools under private management can scarcely expect to secure a steady supply of really competent teachers.

A Committee, mainly composed of official and non-official educationists, was appointed by Government with the Director as Chairman to consider certain important questions relating to the treatment of English and Vernacular as media of instruction in schools, and other kindred questions. The findings of the Committee were accepted by Government and in the early part of the present official year an Education Department circular embodying the instructions of Government based on the Committee's report was issued to all managers of Anglo-Vernacular and Normal schools.

Collegiate Education.

183. The total number of students on the rolls in Government and Judson Colleges in Arts, Science and Law (852) shows an increase of 52 over the previous year's figure. In both colleges there was a larger attendance. In Government College the number of students taking Arts courses fell from 393 to 356 while in Science the numbers rose from 241 to 308 and in Law from 53 to 71.

The following is a comparative statement of University Examination results in 1918-19 and 1919-20:—

Nature of Examinations.	1918-19.			1919-20.		
	Number presented.	Number passed.	Per cent.	Number presented.	Number passed.	Per cent.
Intermediate { Arts ...	203	139	68	194	88	45
Intermediate { Science	80	59	74	96	38	40
Bachelor Degree { Arts ...	79	54	68	122	71	58
Bachelor Degree { Science	29	21	72	34	22	65
Master of Arts Degree	1	...	...	5	3	60
Bachelor of Law Degree	17	14	82	36	18	50

A larger number of candidates passed the examination for the Bachelor's degree in Arts, Science and Law than in 1919, but there is a considerable fall in the number of passes in the Intermediate examination. Percentages are lower throughout. The officiating Principal of Government College, Dr. Ross, conjectures, on grounds that seem adequate, that the increase in failures this year is to be accounted for by " a greater strictness in valuing papers; perhaps due to the publication of the Calcutta University Commission's Report."

The subjects of instruction provided for students in the College remain the same as in 1918-19. The courses in Arts were still predominatingly scientific, and in the Intermediate courses in Arts Chemistry is practically a compulsory subject. These anomalous conditions however are soon to pass away.

A remarkable feature in the Intermediate examination results is the greater degree of success in English obtained by candidates on the Arts side than by candidates on the Science side. The officiating Principal suggests that the true explanation " appears to lie in the beneficial effect of other Arts studies, such as they are, upon the candidate's English, particularly in the case of those who would not otherwise use English largely." It may also be conjectured that some elect the Science side, not from a particular liking or aptitude for scientific studies but, knowing themselves to be weak in English, in the hope of escaping English in the B.Sc. courses. This hope, if there be any truth in the surmise, is, for students who will hereafter take the degree courses in Science of the Rangoon University, destined to be frustrated.

There were various changes in the staff occasioned by Professors proceeding on furlough and by Professors returning from military service. Two new temporary posts were sanctioned—the post of Demonstrator in Physics and that of additional Demonstrator in Chemistry.

Two students of the College sent to the Cadet Training School at Indore passed out well and received commissions in the 70th Burma Rifles.

On the other hand the work of developing the half Company of University Volunteers has been a continual series of disappointments. For these disappointments however neither the College authorities nor the students, who volunteered in large numbers, were responsible.

Among the important events of the year at Judson College were :—

(1) The complete segregation of the College from the schools with which it was formerly connected. This has made it possible for the Principal to give closer attention to the administration of the College and to discipline, as well as to do more teaching.

(2) The opening of a new hostel for girls, under the care of a Dean of Women, Miss H. K. Hunt.

(3) The small enrolment in the entering class. This is attributed in part to the abolition of the Matriculation examination, but more to the increasing demand for the Science course, which the College was unable to offer.

There were during the year 12 students who held Burma scholarships, one a lady, attending the Medical College in Calcutta. Out of three in the sixth year class one passed the final M.B. and one out of two in the third year passed the first M.B. examination. There were five women students from Burma holding scholarships in the Lady Hardinge Medical College for Women, Delhi. One of these passed the first medical examination. The Principal of the College reports satisfactory progress in all the scholarship-holders. In the Burma Medical School 165 students attended during the year, 90 of whom were Burmese. The popularity of the school amongst Burmese is said to be slowly increasing, but of 16 students, out of 17 presented, who passed out of the school, only 8 were Burmese. In the Intermediate examination 36 students passed out of 43 and in the Primary examination 30 out of 37.

There were in the Veterinary School, Insein, 42 pupils in the beginning of the year and 45 at the close.

One thousand five hundred and sixty-five students sat for the *Patamabyan* examination as against 1,426 in 1918-19, but the number of successful candidates (501) was slightly lower than in the previous year (504); 38 out of 133 candidates passed the examination in the highest grade, one of them a nun and one a laywoman; 67 passed out of 364 in the *Patamalat*, 2 of them being laymen and three nuns; 396 candidates passed out of 1,068 in the *Patamangè*, 4 of them being laywomen and 18 nuns. The *Patamabyan* certificate was presented by His Honour the Lieutenant-Governor to the winner, U Itheinda, of Magwe, in the Jubilee Hall on Friday, the 20th August 1920.

There were 48 women students in the two affiliated Colleges in 1919-20 as against 39 in the previous year; 13 women students sat for the Intermediate examination in Arts and of these 9 passed; 3 sat for the Intermediate examination in Science and all passed; 3 sat for the B.A. degree examination of whom one passed.

In May 1920 the Secretary of State for India sanctioned the introduction in the Local Legislative Council of the Rangoon University Bill. The Bill has since been passed.

Technical Education.

184. Technical schools are classified as (1) Engineering and Engineering apprentice schools; two schools, both maintained by Government, (2) the Reformatory school, maintained by Government, (3) six Technical and Industrial schools, (4) seven Commercial schools, (5) three schools for the defectives, and (6) Survey schools. All the Engineering, Technical and Industrial schools recognised in 1918-19 remained on the register during the year under review. The number of Commercial schools remained the same, but recognition was withdrawn from one school and a new school was brought on to the register. The conditions under which these commercial schools are recognised are far from satisfactory, and the question of reform is under consideration. All the schools treated in this paragraph, except the Engineering, Reformatory and Survey schools, are under private management.

The Reformatory School at Insein is dealt with in a later section. The number of pupils in Technical and Industrial schools, excluding the Government Engineering School, rose from 341 to 375, while in Commercial schools there was a slight decline, *viz.* from 619 to 601.

In the Government Engineering School, the number on the roll at the end of the year was 93 as compared with 70 in the previous year. Passes fell from 57 to 52.

The Principal reports favourably on the work of the senior students and of the Government and Shan States apprentices, but the new recruits do not seem to be promising material. The school recently has worked under manifest disadvantages, but reforms, long overdue, including the transfer of the school to another department, will, it is hoped, be effected at no distant date.

Ten European, 108 Anglo-Vernacular and 1,146 Vernacular schools presented candidates for the Drawing Examination against 13,113 and 1,287 in the previous year. The total number of candidates was 69,060 of whom 45,496 passed. One hundred and ninety-eight candidates passed the Drawing examination for Teachers' certificates. The number of passes in examinations in other technical subjects was as follows :—

Vocal Music 4,011 ; Cooking 27 ; Dress-making 27 ; Printing 01 ; Book-binding 7 ; Carpentry 184 ; Weaving 131 ; Tinsmith's work 3 ; Cane-work 30 ; Leather-work 15 ; Lace-making 360 ; Slöjd 3,220 ; Needlework 8,941.

Three hundred and thirty-three Anglo-Vernacular, Vernacular and Normal schools, with a total attendance of 12,784 pupils, maintained school gardens. Proposals have been submitted to Government for the appointment of a Science Graduate as Assistant Inspector with the duty

of supervising school gardens. In the supervision of school gardens the Educational Department will have the advice and assistance of the Department of Agriculture.

By the kindness of the Agri-Horticultural Society of Burma a very successful show of flowers and vegetables grown in school gardens in the Rangoon and Pegu Circles was held in January 1920. The Agri-Horticultural Society generously presented all the prizes except certain special and extra prizes given by the Education Department. A similar show was held in Moulmein for schools in the Tenasserim Circle. Prizes and bonuses for school gardens were also awarded in the remaining circles.

The number of Survey schools under the control of the Commissioner of Settlements and Land Records remained the same as in the previous year, *viz.* 18, but the number of pupils on the rolls rose by 24 to 241. The curriculum of the Survey Schools was revised with the effect of giving it a more practical bent, and the Commissioner notes that the results, so far as they have been tested in the last examination, are satisfactory. The number of candidates presented for the Syndicate's examination in Arithmetic, Revenue Law and Survey was 271, 248 and 289, and the number passed 225, 198 and 210 respectively. These results compare very favourably with the results of the previous year.

There are three schools for the Blind in the Province: St. Michael's for boys and St. Mary's for girls, both in Kemmendine, and a technical school for the Blind in Moulmein. There were on the 31st March 25 pupils in the Kemmendine schools and 22 in the Moulmein school. A new building for the Kemmendine boys' school was completed during the year and was opened by the Lieutenant-Governor. In all three schools there was satisfactory progress together with promise of development in the future.

Owing to the philanthropic enterprise of Miss Mary Chapman a school for the Deaf in Rangoon was recognised in the latter part of the year but was not actually opened till the beginning of the current year.

Training Schools.

185. The most important events of the year relating to Training Schools are, first, the reorganisation of the existing Course of Training in Anglo-Vernacular and Vernacular Normal Schools, and secondly, the institution as an experimental measure of two Monastic Training Schools, one in Upper and the other in Lower Burma.

The course for the Anglo-Vernacular High School Certificate is still retained, but is only retained until the University comes into being. The University scheme includes a course of study and an examination for a diploma in education, for which graduates in Arts and Science are alone eligible. With the institution of this course, there will be no room for the Burma High School Certificate.

The Anglo-Vernacular Primary Grade course has been abolished, but the departmental system will, after the close of the year 1920-21, consist of a course, ordinarily of one year's duration, qualifying for the School Teachers' Certificate, and a specialised course of two years' duration qualifying for a Kindergarten certificate.

The Vernacular Normal courses and examinations have also been simplified on much the same lines as the Anglo-Vernacular. For the old courses are substituted a course for the Vernacular School Certificate, and a course for the Elementary Teachers' Certificate.

In May 1920 a scheme was sanctioned by Government for the institution of two Monastic Training Schools, one in Mandalay and one in Moulmein. The Training Schools are attached to existing Monastic schools and are under the general control of the head *pôngyi* of the *kyaung*. The students under training are all monks, and an experienced graduate, who is assisted by a competent staff, has been appointed as Master of Method, and suitable courses of training have been arranged. The salary of the Master of Method and his assistants are paid from public funds; grants are also made for equipment, and a sum of Rs. 12 a month is paid to the *kyaung* on account of every *pôngyi* and *upazin* student admitted to the school. The two schools were opened at the beginning of the current year and there is every prospect of their proving a genuine success.

The number of Training Schools for masters remained unchanged, *viz.* five schools under public and three under private management. In the Government Schools, however, girl students are still admitted, though they are in a small minority in four out of the five schools. The total number of schools for mistresses is now six, all under private management. The number of students undergoing training in the several grades in the Anglo-Vernacular and Vernacular Normal Schools for 1918-19 and 1919-20 respectively was as follows:—

Grades.	Anglo-Vernacular.				Vernacular.			
	1918-19.		1919-20.		1918-19.		1919-20.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
High ...	17	1	8	5	19	1	27	2
Middle ...	73	37	43	32	165	49	168	60
Primary ...	57	56	49	48	65	86	60	102

In Anglo-Vernacular Training Schools there was a fall in numbers in every class except that of women in the High Grade. The slight fall in the Primary Grade is not to be regretted; under the new scheme, this grade disappears altogether. The fall in the number of students undergoing training in the Middle Grade is considerable.

The Vernacular Training Schools show some increase in every grade and class except the Primary for men. The fall here is inconsiderable and, for reasons already stated is of little significance. It is also much more than counterbalanced by the development of the Elementary Training system. The number of Elementary Training Classes attached to recognised Vernacular Schools rose from 33 to 40, and the number of pupils in these schools from 416 to 494. The figures for men and women are respectively 298 to 395 men, and 118 to 99 women.

The following tables show Anglo-Vernacular and Vernacular Examination results. Examinations are conducted by the Educational Syndicate :—

Grades.	Anglo-Vernacular.		Vernacular.	
	1918-19.	1919-20.	1918-19.	1919-20.
High ...	28	14	22	30
Middle ..	63	91	76	106
Primary ...	114	93	439	224

The decline in the Vernacular Primary Grade is due to the failure of the untrained candidates, of whom only 32 per cent. passed compared with 78 per cent. in the previous year.

The number of candidates who were presented for the Elementary Teachers' examinations in 1918-19 and 1919-20 and the number of successful candidates were respectively 418 and 306 for the first of the two years, and 500 and 399 for the second.

European Schools.

186. The number of European Schools remained unchanged, but pupils have increased at every stage except the middle, where there is a loss of one. College students have increased from 48 to 60, high school pupils from 387 to 415, primary school pupils from 3,468 to 3,666. In the middle standards the numbers have fallen from 1,358 to 1,357. There is a decrease in students under training for teaching from 42 to 38, and of pupils in special schools, chiefly commercial schools, from 272 to 260. Of the total of 5,796 Europeans under instruction 5,283 are in schools for Europeans (an increase of 230), and 513 in schools for non-Europeans (a decrease of 9). The number of non-Europeans in European schools has fallen from 679 to 651.

The difficulty in connection with the admission of non-Europeans into European schools was settled during the year. The revised rules are contained in paragraphs 42—45 of the Educational Rules.

The following is a statement of the results attained by European candidates in public examinations. There was a considerable increase in

the number of candidates presented and successful in the Middle School Examination but a decided fall in the number of candidates presented for the High School Examination, though the number of passes increased :—

		1918-19.			1919-20.		
		Presented.	Passed.	Per cent.	Presented.	Passed.	Per cent.
University	Degree ...	9	5	56	5	4	80
	Intermediate	17	12	71	20	14	70
Schools	High ...	164	82	50	109	94	86
	Middle ...	303	209	69	366	25	68

The revision of the European School curriculum was completed during the year. The full scheme of courses and examinations is set out in the Educational Calendar. The revision leaves undecided the important question of the adequate instruction of European girls in the various subjects included under the general head of Domestic Economy. A Conference on this question was held in the Director's office on November 14th, 1919. The subject is still under consideration.

The Code of Regulations for European Schools—at least in the form of a separate volume—will be rendered superfluous and definitely superseded on the issue of the Educational Calendar. The new Grants-in-aid Code is common to Anglo-Vernacular and European schools. The Calendar will contain the curriculum for European as well as for Anglo-Vernacular schools, and the Educational Rules are also common, except for a short chapter of additional rules for schools for Europeans. The additional rules treat merely of the conditions of admission of non-Europeans to European schools, religious instruction, and co-education. The first rule defines schools for Europeans as " schools in which a special curriculum and discipline are prescribed suitable for pupils of European descent, pure or mixed, who retain European habits and modes of life and who speak a European language."

Education of Mahomedans and Special Classes.

187. The total number of Mahomedans reported to be under instruction in all classes of schools, public and private, rose by 3,673, *i.e.* from 26,890 to 30,563. Of the total 3,673 only 278 are accounted for by public schools. The higher figures for private Mahomedan schools probably indicate rather greater success on the part of Deputy Inspectors in collecting statistics than a rise in the actual attendance.

The figures for recognised schools maintained exclusively for Mahomedans are 6 Anglo-Vernacular schools with 655 pupils, 202 Vernacular schools with 10,533 pupils, *i.e.* total 208 schools and 11,188 pupils as against 214 schools and 11,169 pupils in the previous year. The number of schools has fallen slightly while the number of pupils remains much the same.

If Mahomedan pupils in recognised institutions of every kind are classed according to grade of institution the figures for 1918-19 and 1919-20 are :—

	1918-19.	1919-20.
Collegiate	53	56
Secondary	6,102	6,922
Primary	12,496	11,932
Total ...	18,651	18,910

Mahomedans under instruction in public schools form 5·9 *per cent.* of the total number of pupils in the high stage, 5·8 *per cent.* of the total in the middle stage and 5·8 *per cent.* of the total in the high and middle stages taken together.

The number of Mahomedan girls under instruction in public institutions rose slightly (from 4,480 to 4,566). In private institutions the recorded figures are 3,633 as against 2,357 for the previous year.

The comparative figures for examinations are as follows :—

		1918-19.	1919-20.
University ...	Degree	7	6
	Intermediate ...	11	8
Schools ...	High	14	21
	Middle	122	147

The total number of pupils belonging to special classes receiving instruction in all kinds of schools, recognised or non-recognised, designed for the special classes and not so designed, has according to the figures, risen, though slightly (90,262 as against 90,143), but the increase is accounted for by the private schools, in which numbers on the rolls are said to have increased by 1,563. In recognised schools the attendance has dropped by 1,444. The following classes however show higher numbers : Chins, Kachins, Palaungs, Lahus and Lawas, Indians including Tamils, Telugus and Bengalees, and Chinese. The order of importance based on the total number of pupils under instruction is as follows : Karens (34,215) ; Chinese (10,868) ; Talaings (8,122) ; Shans (6,551) ; "Indians"

(4,799); Chins (1,712); Taungthus (1,551); Inthas (1,028); Kachins (847); Danus (527), Lahus and Lawas (357) and Palaungs (346). The order is the same as in the previous year except that Chins and Taungthus have changed places.

If comparison is confined to numbers of pupils in recognised schools designed for special classes, the results are as follows:—

In Anglo-Vernacular schools all classes show an increase and in Karen and Tamil and Telugu schools there is a marked increase. Recognised Vernacular schools for special classes share in the general decline, exceptions being Kachins, Tamils, Palaungs, Gurkhas, Lahus and Lawas.

The number on the rolls of the school for the sons of Shan Chiefs, Taunggyi, remains much the same as in the previous year, *viz.* 89, with an average attendance of 70. An Old Boys' Association was formed during the year. Games, military drill, gymnastics and swimming received full attention, and the general health of pupils was good. Extensions to the school buildings, long overdue, are under consideration.

The progress of Anglo-Vernacular education amongst Tamils and Telugus was satisfactory. Conditions are against improvement in Tamil and Telugu Vernacular Schools.

Female Education.

188. The number of girls in recognised schools fell from 116,514 to 115,682. The whole loss occurred in Vernacular schools. The number of Vernacular schools for girls fell by 120 and the attendance of girls in Vernacular schools by 1,922. In every other class of school there was an increase of girls. The largest increase was in Anglo-Vernacular schools, 949. The figures for Vernacular schools analysed show that the loss of primary schools already referred to caused the decline. In both the primary and secondary stages of secondary schools there was an increase, of 1,694 and 133 respectively. The figures for Anglo-Vernacular schools, which show an increase of nearly 20 *per cent.* of girls under instruction, are very satisfactory. The total decrease in the number of girls under instruction in recognised schools is 832 or 0·7 *per cent.* When private schools are brought into the reckoning the figures show a total increase of 654 or 0·5 *per cent.* The rise is accounted for by an increase in the number of Mahomedan girl pupils reported as attending private institutions.

There is evidence of a demand for separate Vernacular girls' schools, and the need for an increasing number of trained women teachers is emphasised by every Inspector of Schools. One Inspector of Schools advocates the opening of more Elementary Training Classes for women teachers.

In the matter of departmental organisation relating to the education of girls' this Province is still far behind other Provinces, though

comparative conditions would warrant a position in the front. A reorganisation of the Women's Educational service is under consideration, the realisation of which, it is trusted, will give an impetus to improvement in many directions. Economic reasons are assigned for the early withdrawal of girls from Vernacular Schools, *viz.* the desire of parents to use the services of little girls for work in the fields. There are, however, other re asons, including a growing distaste for mixed education conducted by men teachers. This distaste is natural and the conditions which produce it may be at least mitigated by increasing the number of Vernacular schools for girls or at any rate the number of qualified women teachers. Very considerable reforms in this direction are possible, if we have a well organised Women's Educational Service to assist and direct, but scarcely otherwise.

The following statement shows the success of girl candidates in public examinations :—

Examination.	1918-19.			1919-20.		
	Number presented.	Number passed.	Per cent.	Number presented.	Number passed.	Per cent.
M.A. Degree ...	...	...	...	1	1	100
B.A. Degree ...	2	2	100	5	3	60
Intermediate in Arts ...	12	7	58	14	9	64
Intermediate in Science	5	5	100	3	3	100
Anglo-Vernacular High School	41	27	66	48	27	56
European High School	71	46	65	51	43	84

Reformatory School, Insein.

189. The report of the Superintendent of the Reformatory School in Insein is most satisfactory. There is accommodation in the school for 200 boys, but the total strength at no time exceeded 112. The "average population" was 91 as against 83 for the previous year. The Superintendent thinks that the existence of the school may not be known to some magistrates who try youthful offenders. All things considered, the health of the school was good and there were no deaths. Only 12 boys were punished during the year and out of 33 punishments inflicted 25 were for a minor offence, *viz.* being found in possession of tobacco. The conduct of the school courses on both sides—technical and general—was very satisfactory. The percentage of success in the examinations was very high and the external examiners pronounced themselves greatly pleased with the standard attained. *Sayadaw* U Nyaneinda continued to give instruction to Buddhists with exemplary zeal and regularity. Athletics received due attention. The school

entered for the local tournament in football and the usual athletic sports were held on Durbar Day. The school was visited during the year by the Jail Committee, as also three times by the Inspector-General of Prisons and twice by the Director of Public Instruction. The Superintendent has again to be congratulated on the efficient conduct of the school.

Literature and the Press.

190. Despite increased cost of production the number of publications registered rose from 167 in the previous year to 188 in 1919. One hundred and three were in Burmese, 5 in English, 5 in Anglo-Burmese, 3 in Tamil-English, 2 in Pāli, 37 in Pāli-Burmese, and the remainder in Tamil, Telugu, Chin, Kachin and other languages. Two dialects (Lai and Mogi) appear for the first time. Eighteen of the 188 were educational, 87 religious, 24 fiction, 11 language, 10 drama, 8 philosophy, 7 science and 4 each history and poetry, 3 medicine, 2 biography, 1 law and 27 miscellaneous, the last named being principally articles of Association, etc., of Co-operative Societies and Clubs. A manual of Book-keeping in Burmese, treatises on astrology and flesh eating also in Burmese, and an English pamphlet on the extension of agricultural banking are to be noted. The religious publications included 66 in Burmese, Pāli or Pāli-Burmese, principally dissertations and sermons, with discussions of doctrinal points, including the propriety of honouring an unconsecrated image. "The Pilgrims' Progress" was translated into Kachin. The Christian publications included translations of the scriptures, Salvation Army songs, moral stories and pamphlets dealing with denominational questions.

Publications registered.

The subjects of drama are of the usual mythical or semi-historical type. Some of the plays were branded as unfit for public perusal, containing obscene passages.

The increase in fiction is largely due to the issue of a weekly Burmese paper entitled "The Story Teller." Detective stories were the subject of an English and a Tamil book. The Burmese fiction is still largely concerned with amorous adventures or the course of true love but there is no sign of a great writer of fiction as yet. Three books varied from the normal plot, one dealing with the rivalry of a father and a son for a young girl (in which youth won), another with a pious and patient wife's redemption of a dissipated husband and a third with romantic adventure based on Rider Haggard.

History dealt with such widely separated subjects as St. Paul, the period between the New and the Old Testament, King Hanthawaddy Sinbyushin and Portugal, the last named an unusual choice. A Life of Livingstone in Sgaw-Karen was one of the two biographical works.

The one legal work dealt with disputed points of Buddhist Law on inheritance, gifts, marriage, divorce and adoption.

Four of the eleven books on language were concerned with Kachin, three with Pāli, two with Tamil and two with Burmese.

Native systems of medicine were dealt with in two of the three medical works the third being an Anglo-Burmese "Manual for Mothers." Science was largely geography but a "Practical Guide to Electrcity" in Burmese was included. A collection of Burmese songs dealing with the war is one of the poetry item.

Presses, Newspapers and Periodicals.

191. Excluding the three Government Presses at Rangoon and Maymyo there were 177 Presses at work during 1919-20 as compared with 154 in the previous year. Fifteen presses closed and 38 were opened of which 18 were in Rangoon, where the number increased from 70 to 83. Mandalay increased by 6 to a total of 36, Ma-ubin by 3, Pyapôn by 2, Insein, Tharrawaddy and Toungoo by 1 each.

This increase in the number of presses was reflected in the number of newspapers published which rose from 53 to 58, of which 46 were in Rangoon, 5 in Mandalay, 3 in Bassein and one each in Akyab, Tharrawaddy, Amherst and Promè. Rangoon produced 7 new papers (1 a daily) and Tharrawaddy, Prome and Mandalay 1 each, while 2 were discontinued and 2 reclassified in Rangoon and 1 was discontinued in Akyab. Five of the 12 daily papers in the Province were published in English, 5 in Burmese, 1 in Chinese and 1 in Tamil. Of the others, 19 were in English, 15 in Burmese, 6 in Sgaw-Karen, and 1 each in Anglo-Burmese, Anglo-Urdu, Chin, Gujarati, Kachin and Pwo-Karen.

The number of periodicals published (excluding newspapers and Government publications) rose from 28 to 36 of which 16 were in Burmese (an increase of 5), 13 in English (an increase of 2), 3 in Anglo-Burmese (an increase of 1), 2 in Sgaw-Karen and 1 each in Pwo-Karen and Tamil. Rangoon presses produced 25 out of the 36, Toungoo 4, Mandalay 3, Amherst, Insein, Tharrawaddy and Pegu 1 each.

Literary Societies.

See paragraph 294 of the *Report on the Administration of Burma* for the year 1911-12.

Rangoon Societies.

192. Of Literary Societies properly so called there were four in Rangoon, as in the previous year, the Literary Society, the Rangoon Teachers' Association, the Bernard Free Library and the Burma Research Society. The first named saw its membership increase from 170 to 180, and its income, which is derived entirely from subscriptions, rise from Rs. 8,079 to Rs. 8,878. Enhanced prices discouraged the purchase of new books, of which only 329 were added to the library, as against 427 in the previous year. All outstanding debentures were paid

off during the year, and the Society closed their accounts with a balance of Rs. 5,391. Representatives of the Society had a Conference with the municipal authorities in connexion with the proposal to establish a public library in Rangoon. The year was uneventful.

Two series of lectures were delivered in the hall of the Rangoon Teachers' Association. Eighty-one books were added to the library, which at the end of the year contained 4,129 volumes. Visitors to the Reading Room showed a further decline, from 6,987 to 5,757. A possible explanation of this is the diminished interest in newspapers owing to the close of the war.

The Bernard Free Library contained 10,833 books at the end of the year, as against 10,735. The number of registered borrowers increased from 2,005 to 2,114. The monthly average number of readers in the General Department fell from 906 to 824, and in the Manuscript Department from 94 to 64. The average number of books on loan also declined from 771 to 661. The work of collecting ancient manuscripts made steady progress; 20 were added by copying, and 27 by purchase. Nine Pāli Manuscripts were purchased for the Government of Siam, and three *Zats* were sent out by the India Office for collation and return. The balance at the end of the year increased from Rs. 5,098 to Rs. 7,140.

Arts and Sciences.

193. During the leave in England of the Provincial Art Officer, an exhibition in London was arranged in conjunction with the Indian Trades Commissioner at which a number of Burmese village art products were made known to likely buyers. The exhibition was open from October 20th, 1919, for a fortnight, and in the opinion of the Provincial Art Officer it proved that a market exists for Burmese products, especially black pottery, if regular supplies can be guaranteed, and if the needs and possibilities of the markets are kept in mind. The Provincial Art Officer also lectured on the artistic side of the question at 14, Imperial Institute, and at the Royal Society of Arts, the possibilities of development being emphasised on both lectures. The Annual Art Exhibition was held in Rangoon in February 1920 and the exhibits were considered satisfactory, sales being readily effected. Better facilities for marketing their wares, which must be recognised as essential to the prosperity of art craftsmen, may be regarded as the work of the Co-operative Department; the fulfilment of the hint given by the Industrial Commission as to a European market, which led the Provincial Art Officer to organise the London Exhibition, will fall to the Development and Industries Departments when in full operation.

The Burma Art Club which was started in January 1920 was not officially recognised until after the close of the year under review, its promoters having shown their intention of justifying their ambitions.

CHAPTER VIII.

ARCHAEOLOGY.

REFERENCE—

Report of the Superintendent, Archaeological Survey, Burma, for the year 1919-20.

194. During the year the first part of the first volume of *Epigraphia Birmanica* was published, containing the four faces of the Myazedi pillar with its inscriptions in Burmese, Pāli, Talaing and Pyu. The deciphering of the Talaing and Pyu inscriptions was the work of Mr. C. O. Blagden, whose enthusiastic interest in the work is of great assistance. The second part consisting of eight Talaing inscriptions, also by Mr. Blagden was completed for press. The second volume, a monograph on the 400 Talaing plaques on the Ananda Temple, Pagan, by Mr. Duroiselle, was advanced to the final proof stage. The first part of the third volume, consisting largely of the Talaing inscription by Mr. Blagden was completed and in proof; the second part by Mr. Duroiselle, containing the inscription on the large bell at the Shwezigôn Pagoda, Pagan, in Burmese, Talaing and Pāli, and a short Talaing inscription lately found at Pegu, was made ready for press. Owing to the importance of Mr. Blagden's Talaing inscriptions, supplementary copies have been made available so as to form a handy volume.

Some progress was made with the drawings for the completion of A History of Architecture at Pagan, but up to the end of the year only seven out of 42 selected monuments had been dealt with. The monograph on the 500 terra-cotta plaques illustrating the *Jataka* stories at the Petleik Pagoda, Pagan, was begun, but work on the *Epigraphia Birmanica* was given preference. Progress was made with the completion of an exhaustive list of inscriptions found in Burma, Part II forming an annotated index to the six volumes of inscriptions already published and to the *Hman-nan-yazawin*. Other items of the sanctioned programme were kept in abeyance, Mr. Duroiselle having to carry on epigraphical as well as archaeological duties. These include the Architectural Survey of the Palace Buidings, Mandalay, and the *Catalogue raisonné* of the Pagan and Mandalay Museums. A revised catalogue of the coins in the Phayre Provincial Museum, Rangoon, is in hand.

Following the Lieutenant-Governor's visit to Pagan in July 1919 a committee was formed, which recommended a programme of roads connecting the various pagodas and other improvements so that Pagan might become not only a site for overseas tourists to visit but also eventually a

place of pilgrimage where Burmans from every part of the Province, and school-children might contrast the architectural glories of Burma's past with the modern museum.

The work of improving Mandalay. Palace garden has not progressed beyond on the stage of consideration of the merits of competing schemes.

On Mr. Taw Sein Ko's retirement after 32 years' service under different Government Departments. Mr. Charles Duroiselle was appointed Superintendent and the post of Archaeological Assistant for Epigraphy sanctioned in 1914 for six years and held by Mr. Duroiselle was abolished. The staffs of the Superintendent and Epigraphist were amalgamated. The Archaeological Scholarship does not appeal to young Burman Graduates and the difficulty of securing a trained permanent staff continues. The valuable services of Maung San Shwe Bu, Honorary Archaeological officer for Arakan, have aroused and maintained local interest in the subject, as evidenced by the memorial for the preservation of the Shitthaung Temple and the formulation of a scheme for trustees for the Mahamuni Temple.

Discovery during the year of two Talaing inscriptions of the 15th century at Pegu and of four Burmese inscriptions at Yawnghwe (Southern Shan States), Minnanthu (near Pagan), Taungtha and Lunbogon, in the Kyauksè District was recorded As the outcome of a villager's dream a standing Buddha in bronze of the XIIIth or early XIVth century and some votive tablets were found at Sameikshe, Thazi Township. These tablets are the first found with an inscription in Burmese .dating back to the XI-XIIth century. A rare figure of Buddha seated European fashion, with legs hanging down was found at Twante; also eight small bronze figures at Myitkyina, brass models and silver plated images at Taloksu (Kyauksè District) and a number of small bronze figures in an encased brick *stupa* near the Dhammayangyi Temple, Pagan, dating from the XI-XIIth century.

The relations of Burma with Ceylon and the Malay Peninsula in the eleventh and twelfth centuries have been somewhat elucidated by comparison of the Burmese chronicles with other sources, and study of the plaques and inscriptions of the XII-XIIIth centuries, suggests the presence in Pagan of Indians from Southern India.

Expenditure on Archaeological work during the year amounted to Rs. 61 652, an increase of Rs. 11,397 over 1918-19. Mandalay Division absorbed Rs. 57,250, spent mainly on the Palace and grounds. The Government of India contributed Rs. 26,257 to this expenditure. The cost of the Archaeological Survey (including the Assistant for Epigraphy) fell from Rs. 37,256 in 1918-19 to Rs. 34,367 in the year under report.

CHAPTER IX.

MISCELLANEOUS.

REFERENCES—

Report of the Chemical Examiner to the Government of Burma for the year 1919.

Report on the working of the Pasteur Institute and Bacteriological Laboratory for the year ending 31st March 1920.

Statistical Abstract for British India, Volume IV.

Report on the working of the Office of the Superintendent, Government Printing, Burma, for the year ending 31st March 1920.

Ecclesiastical Jurisdiction.

See paragraphs 279 to 300 of the *Report on the Administration of Burma* for the year 1911-12.

Ecclesiastical.

195. During the year a number of Chaplains returned from military duty including the Rev. W. R. Park, who had been for a time acting as Principal Chaplain to the Mesopotamia Field Force and was awarded the C.I.E. and the O.B.E., for good service rendered. Two new Chaplains were appointed to fill existing vacancies. The same shortage of staff as was felt last year in the Chaplaincies of the Additional Clergy Society continued throughout the year of report.

Stationery.

196. The bulk of the paper used for official purposes continued to be supplied by the Controller of Printing, Stationery and Stamps, Calcutta, from the Indian Mills. The cost of stationery supplied to General Departments and Government Presses in Burma during the year amounted to Rs. 93,642 and Rs. 3,48,116, respectively, showing increases of Rs. 21,996 and Rs. 17,937, respectively, over the figures of the previous year.

Offices of the Chemical Examiner and the Bacteriologist to the Government of Burma.

197. The number of articles examined for medico-legal purposes was 1,802 as compared with 1,774 in 1918; and the total number of general analyses was 7,188 as compared with 6,523.

Two hundred and seventy-seven samples of water were analysed for various departments.

The work of the Bacteriological Department is no longer performed by the Chemical Examiner; it has been handed over to the Director of the Pasteur Institute. This branch of work shows a very large increase as compared with last year's figures amounting to 34·37 *per cent.*

The bacteriological, serological and histological examinations numbered 1,681, while the protective inoculations numbered 974, most of them autogenous vaccines. A large number of cases of leprosy have been treated with injections of morrhuate of soda and investigations carried out to determine the best method of detecting leprosy in its earliest stages. It would appear from the results obtained that leprosy is much more common than is generally supposed. The increasing interest in syphilitic diseases has led to a large increase in the number of Wasserman reactions tested.

Office of the Superintendent, Government Printing, Burma.

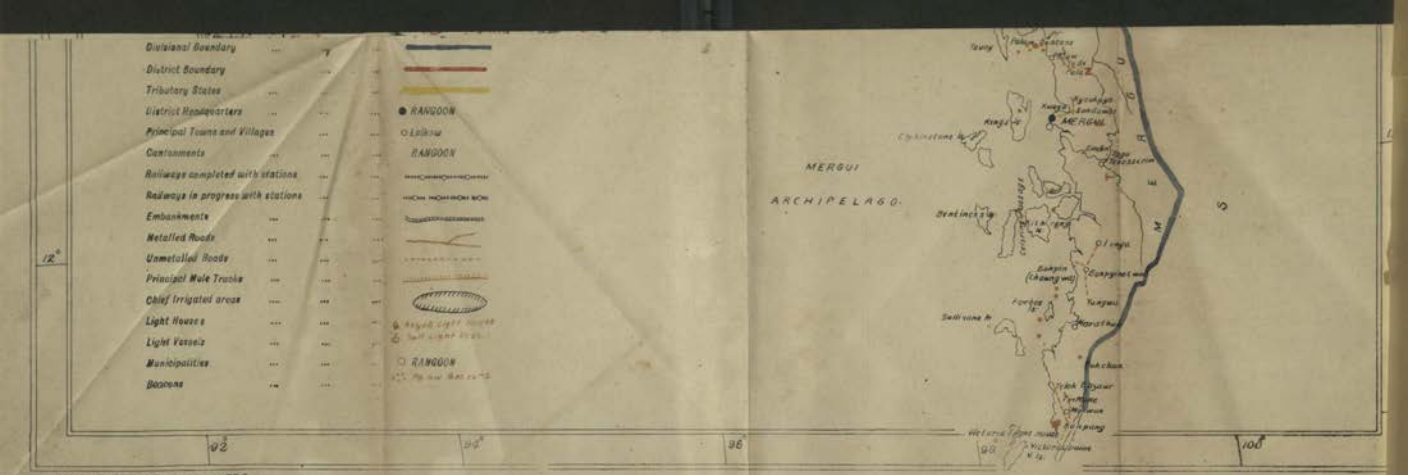
198. The work which is carried out in the three Government Presses, *viz.* the Central Press and the Jail Branch Press, both in Rangoon, and the Maymyo Branch Press, is chiefly printing for Government Departments. The receipts rose from Rs. 55,858 to Rs. 68,617 and the expenditure from Rs. 3,27,223 to Rs. 3,82,347 in the year of report. The increase in expenditure is chiefly due to increased outturn of work. The cost of work done in the Central Press was Rs. 2,90,074; in the Jail Branch Press Rs. 99,547, and in the Maymyo Branch Press Rs. 18,199—in all Rs. 4,07,820. The corresponding total for 1918-19 was Rs. 3,71,992. The value of the dead stock at the three presses, exclusive of lands and buildings, was estimated at the close of the year to be Rs. 5,61,019 or Rs. 31,581 less than in the previous year. The decrease is chiefly due to the depreciated value of the stock. The value of the sales (excluding those of Gazettes) made to the public at the Book Depôt and by the authorized agents amounted to Rs. 17,341 against Rs. 15,346 in the previous year, and the additions to stock were valued at Rs. 58,641. Acts and publications supplied free during the year were valued at Rs. 50,893 against Rs. 24,031 in the previous year. The increase in value is mainly due to the enhanced prices of the publications. The year under review shows an increase in the rate of productive charges and a corresponding decrease in the cost per unit, which may be attributed to a gradual return to pre-war conditions and to a steady increase in the demand for printing work by nearly every department of Government.

G.B.C.P.O.—No. 651, C. Secy., 18-4-1922—650.

LIBRARY
OF THE
BOMBAY
BRANCH
OF THE
ROYAL ASIATIC SOCIETY.

Map
OF
BURMA
SHOWING
DIVISIONS AND DISTRICTS
[To accompany the Administration Report.]
1919-20
Scale: 1 inch = 32 miles.
NAGA TRIBES
MANIPUR
LUSHAI HILLS
CHITTAGONG
HAUT LAOS
MAWLAIK
MONYWA
MYINGYAN
PALETWA
MOGOK
MOMEIK
KATHA
SHWEBO
MYITKYINA
BHAMO
LOWER CHINDWIN
UPPER CHINDWIN
NORTHERN SHAN STATES
SOUTHERN SHAN STATES
KACHIN HILLS
CHIN HILLS
22°
24°
26°
28°
92°
94°
96°
98°
100°
102°

BAY OF
BENGAL
S I A M
MARTABAN
MOUTHS OF THE IRRAWADDY
Cape Negrais
Diamond Is.
Light House
Alguada Reef
Bassein
Rangoon
Prome
Thayetmyo
Pegu
Moulmein
Amherst
Mergui
Tavoy
Tavoy point
Light House
Cheduba Strait
Cheduba Pt.
Sesostris Light House
Zalun Taung Light
Bluff C.
Buffalo Is.
Brisbane Light Vessel
Table Island Light House
Great Coco
Chiang Mai
Kyaikkami
Thatung
Sittang
Martaban
Salween
Irrawaddy
Tenasserim
Amherst
Mergui
Tavoy
Thayetmyo
Prome
Pegu
Rangoon
Bassein
Moulmein


Divisional Boundary
District Boundary
Tributary States
District Headquarters
RANGOON
Principal Towns and Villages
Loikaw
Cantonments
RANGOON
Railways completed with stations
Railways in progress with stations
Embankments
Metalled Roads
Unmetalled Roads
Principal Mule Tracks
Chief Irrigated areas
Light Houses
Light Vessels
Municipalities
RANGOON
Beacons
MERGUI
ARCHIPELAGO.
MERGUI
Kisseraing I.
Clerke Rocks
Stewart Sound
Elphinstone I.
Domel I.
Sullivans Pt.
Victoria Point
12°
92°
94°
96°
98°
100°

00133909

Digitized with financial assistance from

Government of Maharashtra

on 01 February, 2020